



SEQUENCE LISTING

5 <110> BOEHRINGER INGELHEIM (CANADA) LTD.
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 <141> 2004-02-27
20 <150> 60/257,857
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	Arg Leu Ile Trp Trp Leu Gln Tyr Phe Ile Thr Arg Ala Glu Ala His	
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	Leu Gln Val Trp Ile Pro Pro Leu Asn Val Arg Gly Gly Arg Asp Ala	
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	Val Ile Leu Leu Thr Cys Ala Ile His Pro Glu Leu Ile Phe Thr Ile	
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	Thr Lys Ile Leu Leu Ala Ile Leu Gly Pro Leu Met Val Leu Gln Ala	
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	Gly Ile Thr Lys Val Pro Tyr Phe Val Arg Ala His Gly Leu Ile Arg	
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	Ala Cys Met Leu Val Arg Lys Val Ala Gly Gly His Tyr Val Gln Met	
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	Ala Leu Met Lys Leu Ala Ala Leu Thr Gly Thr Tyr Val Tyr Asp His	
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	Leu Thr Pro Leu Arg Asp Trp Ala His Ala Gly Leu Arg Asp Leu Ala	
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	Val Ala Val Glu Pro Val Val Phe Ser Asp Met Glu Thr Lys Val Ile	
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	Thr Trp Gly Ala Asp Thr Ala Ala Cys Gly Asp Ile Ile Leu Gly Leu	
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	Pro Val Ser Ala Arg Arg Gly Arg Glu Ile His Leu Gly Pro Ala Asp	
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	Ser Leu Glu Gly Gln Gly Trp Arg Leu Leu Ala Pro Ile Thr Ala Tyr	
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	Gly Arg Asp Arg Asn Gln Val Glu Gly Glu Val Gln Val Val Ser Thr	
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	Ala Thr Gln Ser Phe Leu Ala Thr Cys Val Asn Gly Val Cys Trp Thr	
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	Val Tyr His Gly Ala Gly Ser Lys Thr Leu Ala Gly Pro Lys Gly Pro	
	275 280 285	
25	atc acc caa atg tac acc aat gtg gac cag gac ctc gtc ggc tgg caa	2711
	Ile Thr Gln Met Tyr Thr Asn Val Asp Gln Asp Leu Val Gly Trp Gln	
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	Ala Pro Pro Gly Ala Arg Ser Leu Thr Pro Cys Thr Cys Gly Ser Ser	
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	Asp Leu Tyr Leu Val Thr Arg His Ala Asp Val Ile Pro Val Arg Arg	
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	Arg Gly Asp Ser Arg Gly Ser Leu Leu Ser Pro Arg Pro Val Ser Tyr	
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	Leu Lys Gly Ser Ser Gly Gly Pro Leu Leu Cys Pro Ser Gly His Ala	
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	Val Asp Phe Val Pro Val Glu Ser Met Glu Thr Thr Met Arg Ser Pro	
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	Val Ala His Leu His Ala Pro Thr Gly Ser Gly Lys Ser Thr Lys Val	
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	Pro Ala Ala Tyr Ala Ala Gln Gly Tyr Lys Val Leu Val Leu Asn Pro	
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	Ser Val Ala Ala Thr Leu Gly Phe Gly Ala Tyr Met Ser Lys Ala His	
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	Gly Ile Asp Pro Asn Ile Arg Thr Gly Val Arg Thr Ile Thr Thr Gly	
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	Cys Ser Gly Gly Ala Tyr Asp Ile Ile Cys Asp Glu Cys His Ser	
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	Thr Asp Ser Thr Ile Leu Gly Ile Gly Thr Val Leu Asp Gln Ala	
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	Ile Lys Gly Gly Arg His Leu Ile Phe Cys His Ser Lys Lys Cys	
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	Ile Val Val Ala Thr Asp Ala Leu Met Thr Gly Phe Thr Gly Asp Phe	
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	Asp Ser Val Ile Asp Cys Asn Thr Cys Val Thr Gln Thr Val Asp Phe	
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	675	680	685
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	690	695	700
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	705	710	715
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	720	725	730
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	740	745	750
30	gtc ttt aca ggc ctc acc cac ata gac gcc cat ttc ttg tcc cag act Val Phe Thr Gly Leu Thr His Ile Asp Ala His Phe Leu Ser Gln Thr		4103
	755	760	765
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	835	840	845
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	850	855	860
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	915	920	925		
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	930	935	940		
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	945	950	955		
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	960	965	970	975	
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	980	985	990		
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	995	1000	1005		
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	1075	1080	1085		
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	1090	1095	1100		
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	Gly Cys Pro Leu Pro Ala Lys Ala Pro Pro Ile Pro Pro Pro Arg	
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	Gly Glu Pro Gly Asp Pro Asp Leu Ser Asp Gly Ser Trp Ser Thr Val		
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	Ser Glu Glu Ala Ser Glu Asp Val Val Cys Cys Ser Met Ser Tyr Thr		
	1600	1605	1610
	1615		
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	Trp Thr Gly Ala Leu Ile Thr Pro Cys Ala Ala Glu Glu Thr Lys Leu		
	1620	1625	1630
20	ccc atc aat gca ctg agc aac tct ttg ctc cgt cac cac aac ttg gtc		6743
	Pro Ile Asn Ala Leu Ser Asn Ser Leu Leu Arg His His Asn Leu Val		
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25	tat gct aca aca tct cgc agc gca agc ctg cgg cag aag aag gtc acc		6791
	Tyr Ala Thr Thr Ser Arg Ser Ala Ser Leu Arg Gln Lys Lys Val Thr		
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30	ttt gac aga ctg cag gtc ctg gac gac cac tac cgg gac gtg ctc aag		6839
	Phe Asp Arg Leu Gln Val Leu Asp Asp His Tyr Arg Asp Val Leu Lys		
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35	gag atg aag gcg aag gcg tcc aca gtt aag gct aaa ctt cta tcc gtg		6887
	Glu Met Lys Ala Lys Ala Ser Thr Val Lys Ala Lys Leu Leu Ser Val		
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	1695		
40	gag gaa gcc tgt aag ctg acg ccc cca cat tcg gcc aga tct aaa ttt		6935
	Glu Glu Ala Cys Lys Leu Thr Pro Pro His Ser Ala Arg Ser Lys Phe		
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45	ggc tat ggg gca aag gac gtc cgg aac cta tcc agc aag gcc gtt aac		6983
	Gly Tyr Gly Ala Lys Asp Val Arg Asn Leu Ser Ser Lys Ala Val Asn		
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50	cac atc cgc tcc gtg tgg aag gac ttg ctg gaa gac act gag aca cca		7031
	His Ile Arg Ser Val Trp Lys Asp Leu Leu Glu Asp Thr Glu Thr Pro		
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55	att gac acc acc atc atg gca aaa aat gag gtt ttc tgc gtc caa cca		7079
	Ile Asp Thr Thr Ile Met Ala Lys Asn Glu Val Phe Cys Val Gln Pro		
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60	gag aag ggg ggc cgc aag cca gct cgc ctt atc gta ttc cca gat ttg		7127
	Glu Lys Gly Gly Arg Lys Pro Ala Arg Leu Ile Val Phe Pro Asp Leu		
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	1775		
65	ggg gtt cgt gtg tgc gag aaa atg gcc ctt tac gat gtg gtc tcc acc		7175
	Gly Val Arg Val Cys Glu Lys Met Ala Leu Tyr Asp Val Val Ser Thr		
	1780	1785	1790
70	ctc cct cag gcc gtg atg ggc tct tca tac gga ttc caa tac tct cct		7223
	Leu Pro Gln Ala Val Met Gly Ser Ser Tyr Gly Phe Gln Tyr Ser Pro		

	1795	1800	1805	
	gga cag cgg gtc gag ttc ctg gtg aat gcc tgg aaa gcg aag aaa tgc	gca	gca	7271
	Gly Gln Arg Val Glu Phe Leu Val Asn Ala Trp Lys Ala Lys Lys Cys			
5	1810	1815	1820	
	cct atg ggc ttc gca tat gac acc cgc tgt ttt gac tca acg gtc act	gca	gca	7319
	Pro Met Gly Phe Ala Tyr Asp Thr Arg Cys Phe Asp Ser Thr Val Thr			
	1825	1830	1835	
10	gag aat gac atc cgt gtt gag gag tca atc tac caa tgt tgt gac ttg	gca	gca	7367
	Glu Asn Asp Ile Arg Val Glu Glu Ser Ile Tyr Gln Cys Cys Asp Leu			
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15	gcc ccc gaa gcc aga cag gcc ata agg tcg ctc aca gag cgg ctt tac	gca	gca	7415
	Ala Pro Glu Ala Arg Gln Ala Ile Arg Ser Leu Thr Glu Arg Leu Tyr			
	1860	1865	1870	
20	atc ggg ggc ccc ctg act aat tct aaa ggg cag aac tgc ggc tat cgc	gca	gca	7463
	Ile Gly Gly Pro Leu Thr Asn Ser Lys Gly Gln Asn Cys Gly Tyr Arg			
	1875	1880	1885	
25	cgg tgc cgc gcg agc ggt gta ctg acg acc agc tgc ggt aat acc ctc	gca	gca	7511
	Arg Cys Arg Ala Ser Gly Val Leu Thr Ser Cys Gly Asn Thr Leu			
	1890	1895	1900	
30	aca tgt tac ttg aag gcc gct gcg gcc tgt cga gct gcg aag ctc cag	gca	gca	7559
	Thr Cys Tyr Leu Lys Ala Ala Ala Cys Arg Ala Ala Lys Leu Gln			
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35	gac tgc acg atg ctc gta tgc gga gac gac ctt gtc gtt atc tgt gaa	gca	gca	7607
	Asp Cys Thr Met Leu Val Cys Gly Asp Asp Leu Val Val Ile Cys Glu			
	1920	1925	1930	1935
40	ser gcg ggg acc caa gag gac gag gcg agc cta cgg gcc ttc acg gag	gca	gca	7655
	Ser Ala Gly Thr Gln Glu Asp Glu Ala Ser Leu Arg Ala Phe Thr Glu			
	1940	1945	1950	
45	gct atg act aga tac tct gcc ccc cct ggg gac ccg ccc aaa cca gaa	gca	gca	7703
	Ala Met Thr Arg Tyr Ser Ala Pro Pro Gly Asp Pro Pro Lys Pro Glu			
	1955	1960	1965	
	tac gac ttg gag ttg ata aca tca tgc tcc tcc aat gtg tca gtc gcg	gca	gca	7751
	Tyr Asp Leu Glu Leu Ile Thr Ser Cys Ser Ser Asn Val Ser Val Ala			
	1970	1975	1980	
50	cac gat gca tct ggc aaa agg gtg tac tat ctc acc cgt gac ccc acc	gca	gca	7799
	His Asp Ala Ser Gly Lys Arg Val Tyr Tyr Leu Thr Arg Asp Pro Thr			
	1985	1990	1995	
	acc ccc ctt gcg cggt gct gcg tgg gag aca gct aga cac act cca gtc	gca	gca	7847
	Thr Pro Leu Ala Arg Ala Ala Trp Glu Thr Ala Arg His Thr Pro Val			
	2000	2005	2010	2015
55	aat tcc tgg cta ggc aac atc atc atg tat gcg ccc acc ttg tgg gca	gca	gca	7895
	Asn Ser Trp Leu Gly Asn Ile Ile Met Tyr Ala Pro Thr Leu Trp Ala			
	2020	2025	2030	

	agg atg atc ctg atg act cat ttc ttc tcc atc ctt cta gct cag gaa	7943
	Arg Met Ile Leu Met Thr His Phe Phe Ser Ile Leu Leu Ala Gln Glu	
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	Gln Leu Glu Lys Ala Leu Asp Cys Gln Ile Tyr Gly Ala Cys Tyr Ser	
	2050 2055 2060	
10	att gag cca ctt gac cta cct cag atc att caa cga ctc cac ggc ctt	8039
	Ile Glu Pro Leu Asp Leu Pro Gln Ile Ile Gln Arg Leu His Gly Leu	
	2065 2070 2075	
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	Ser Ala Phe Ser Leu His Ser Tyr Ser Pro Gly Glu Ile Asn Arg Val	
	2080 2085 2090 2095	
20	gct tca tgc ctc agg aaa ctt ggg gta ccg ccc ttg cga gtc tgg aga	8135
	Ala Ser Cys Leu Arg Lys Leu Gly Val Pro Pro Leu Arg Val Trp Arg	
	2100 2105 2110	
	cat cgg gcc aga agt gtc cgc gct agg cta ctg tcc cag ggg ggg agg	8183
	His Arg Ala Arg Ser Val Arg Ala Arg Leu Leu Ser Gln Gly Gly Arg	
	2115 2120 2125	
25	gct gcc act tgt ggc aag tac ctc ttc aac tgg gca gta agg acc aag	8231
	Ala Ala Thr Cys Gly Lys Tyr Leu Phe Asn Trp Ala Val Arg Thr Lys	
	2130 2135 2140	
30	ctc aaa ctc act cca atc ccg gct gcg tcc cag ttg gat tta tcc agc	8279
	Leu Lys Leu Thr Pro Ile Pro Ala Ala Ser Gln Leu Asp Leu Ser Ser	
	2145 2150 2155	
35	tgg ttc gtt gct ggt tac agc ggg gga gac ata tat cac agc ctg tct	8327
	Trp Phe Val Ala Gly Tyr Ser Gly Gly Asp Ile Tyr His Ser Leu Ser	
	2160 2165 2170 2175	
40	cgt gcc cga ccc cgc tgg ttc atg tgg tgc cta ctc cta ctt tct gta	8375
	Arg Ala Arg Pro Arg Trp Phe Met Trp Cys Leu Leu Leu Ser Val	
	2180 2185 2190	
	ggg gta ggc atc tat cta ctc ccc aac cga tga acggggagct aaacactcca	8428
	Gly Val Gly Ile Tyr Leu Leu Pro Asn Arg *	
	2195 2200	
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ccccccccc gggagagcca tagtggtctg cggaaccggg gagtagacaccg gaattgccag 180

15 gacgaccggg tcctttcttg gatcaacccg ctcaatgcct ggagatttg gcgtgcccc 240

gcgagactgc tagccgagta gtgtggggtc gcgaaaggcc ttgtggtaact gcctgatagg 300

gtgctgcga gtgccccggg aggtctcgta gaccgtgcac catgagcacg aatcctaaac 360

ctcaaagaaa aaccaaaaggg cgccgcatga ttgaacaaga tggattgcac gcaggttctc 420

cggccgctt ggtggagagg ctattcggt atgactggc acaacagaca atcggctgct 480

20 ctgatgccgc cgtgttccgg ctgtcagcgc agggcgcggc ggttctttt gtcaagaccg 540

acctgtccgg tgccctgaat gaactgcagg acgaggcgcg gcggtatcg tggctggcca 600

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c atg gac cgg gag atg gca gca tcg tgc gga ggc gcg gtt ttc gta ggt 1849

Met Asp Arg Glu Met Ala Ala Ser Cys Gly Gly Ala Val Phe Val Gly

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15

45 ctg ata ctc ttg acc ttg tca ccg cac tat aag ctg ttc ctc gct agg 1897

Leu Ile Leu Leu Thr Leu Ser Pro His Tyr Lys Leu Phe Leu Ala Arg

20

25

30

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Leu Ile Trp Trp Leu Gln Tyr Phe Ile Thr Arg Ala Glu Ala His Leu

35

40

45

55 caa gtg tgg atc ccc ccc ctc aac gtt cgg ggg ggc cgc gat gcc gtc 1993

Gln Val Trp Ile Pro Pro Leu Asn Val Arg Gly Gly Arg Asp Ala Val

50

55

60

	atc ctc ctc acg tgc gcg atc cac cca gag cta atc ttt acc atc acc Ile Leu Leu Thr Cys Ala Ile His Pro Glu Leu Ile Phe Thr Ile Thr 65	70	75	80	2041
5	aaa atc ttg ctc gcc ata ctc ggt cca ctc atg gtg ctc cag gct ggt Lys Ile Leu Leu Ala Ile Leu Gly Pro Leu Met Val Leu Gln Ala Gly 85	90	95		2089
10	ata acc aaa gtg ccg tac ttc gtg cgc gca cac ggg ctc att cgt gca Ile Thr Lys Val Pro Tyr Phe Val Arg Ala His Gly Leu Ile Arg Ala 100	105	110		2137
15	tgc atg ctg gtg ccg aag gtt gct ggg ggt cat tat gtc caa atg gct Cys Met Leu Val Arg Lys Val Ala Gly Gly His Tyr Val Gln Met Ala 115	120	125		2185
20	ctc atg aag ttg gcc gca ctg aca ggt acg tac gtt tat gac cat ctc Leu Met Lys Leu Ala Ala Leu Thr Gly Thr Tyr Val Tyr Asp His Leu 130	135	140		2233
25	acc cca ctg ccg gac tgg gcc cac gcg ggc cta cga gac ctt gcg gtg Thr Pro Leu Arg Asp Trp Ala His Ala Gly Leu Arg Asp Leu Ala Val 145	150	155	160	2281
30	gca gtt gag ccc gtc gtc ttc tct gat atg gag acc aag gtt atc acc Ala Val Glu Pro Val Val Phe Ser Asp Met Glu Thr Lys Val Ile Thr 165	170	175		2329
35	tgg ggg gca gac acc gcg gcg tgt ggg gac atc atc ttg ggc ctg ccc Trp Gly Ala Asp Thr Ala Ala Cys Gly Asp Ile Ile Leu Gly Leu Pro 180	185	190		2377
40	gtc tcc gcc cgc agg ggg agg gag ata cat ctg gga ccg gca gac agc Val Ser Ala Arg Arg Gly Arg Glu Ile His Leu Gly Pro Ala Asp Ser 195	200	205		2425
45	ctt gaa ggg cag ggg tgg cga ctc ctc gcg cct att acg gcc tac tcc Leu Glu Gly Gln Gly Trp Arg Leu Leu Ala Pro Ile Thr Ala Tyr Ser 210	215	220		2473
50	caa cag acg cga ggc cta ctt ggc tgc atc atc act agc ctc aca ggc Gln Gln Thr Arg Gly Leu Leu Gly Cys Ile Ile Thr Ser Leu Thr Gly 225	230	235	240	2521
55	cgg gac agg aac cag gtc gag ggg gag gtc caa gtg gtc tcc acc gca Arg Asp Arg Asn Gln Val Glu Gly Glu Val Gln Val Val Ser Thr Ala 245	250	255		2569
55	aca caa tct ttc ctg gcg acc tgc gtc aat ggc gtg tgt tgg act gtc Thr Gln Ser Phe Leu Ala Thr Cys Val Asn Gly Val Cys Trp Thr Val 260	265	270		2617
55	tat cat ggt gcc ggc tca aag acc ctt gcc ggc cca aag ggc cca atc Tyr His Gly Ala Gly Ser Lys Thr Leu Ala Gly Pro Lys Gly Pro Ile 275	280	285		2665
	acc caa atg tac acc aat gtg gac cag gac ctc gtc ggc tgg caa gcg				2713

	Thr Gln Met Tyr Thr Asn Val Asp Gln Asp Leu Val Gly Trp Gln Ala		
	290	295	300
5	ccc ccc ggg gcg cgt tcc ttg aca cca tgc acc tgc ggc agc tcg gac		2761
	Pro Pro Gly Ala Arg Ser Leu Thr Pro Cys Thr Cys Gly Ser Ser Asp		
	305	310	315
10	ctt tac ttg gtc acg agg cat gcc gat gtc att ccg gtg cgc cg ^g cg ^g		2809
	Leu Tyr Leu Val Thr Arg His Ala Asp Val Ile Pro Val Arg Arg Arg		
	325	330	335
15	ggc gac agc agg ggg agc cta ctc tcc ccc agg ccc gtc tcc tac ttg		2857
	Gly Asp Ser Arg Gly Ser Leu Leu Ser Pro Arg Pro Val Ser Tyr Leu		
	340	345	350
20	aag ggc tct tcg ggc ggt cca ctg ctc tgc ccc tcg ggg cac gct gtg		2905
	Lys Gly Ser Ser Gly Gly Pro Leu Leu Cys Pro Ser Gly His Ala Val		
	355	360	365
25	ggc atc ttt cgg gct gcc gtg tgc acc cga ggg gtt gcg aag gcg gtg		2953
	Gly Ile Phe Arg Ala Ala Val Cys Thr Arg Gly Val Ala Lys Ala Val		
	370	375	380
30	gac ttt gta ccc gtc gag tct atg gaa acc act atg cgg tcc ccg gtc		3001
	Asp Phe Val Pro Val Glu Ser Met Glu Thr Thr Met Arg Ser Pro Val		
	385	390	395
	400		
35	tcc acg gac aac tcg tcc cct ccg gcc gta ccg cag aca ttc cag gtg		3049
	Phe Thr Asp Asn Ser Ser Pro Pro Ala Val Pro Gln Thr Phe Gln Val		
	405	410	415
40	gcc cat cta cac gcc cct act ggt agc ggc aag agc act aag gtg ccg		3097
	Ala His Leu His Ala Pro Thr Gly Ser Gly Lys Ser Thr Lys Val Pro		
	420	425	430
45	gct gcg tat gca gcc caa ggg tat aag gtg ctt gtc ctg aac ccg tcc		3145
	Ala Ala Tyr Ala Ala Gln Gly Tyr Lys Val Leu Val Leu Asn Pro Ser		
	435	440	445
50	gtc gcc gcc acc cta ggt ttc ggg gcg tat atg tct aag gca cat ggt		3193
	Val Ala Ala Thr Leu Gly Phe Gly Ala Tyr Met Ser Lys Ala His Gly		
	450	455	460
55	atc gac cct aac atc aga acc ggg gta agg acc atc acc acg ggt gcc		3241
	Ile Asp Pro Asn Ile Arg Thr Gly Val Arg Thr Ile Thr Thr Gly Ala		
	465	470	475
	480		
60	ccc atc acg tac tcc acc tat ggc aag ttt ctt gcc gac ggt ggt tgc		3289
	Pro Ile Thr Tyr Ser Thr Tyr Gly Lys Phe Leu Ala Asp Gly Gly Cys		
	485	490	495
65	tct ggg ggc gcc tat gac atc ata ata tgt gat gag tgc cac tca act		3337
	Ser Gly Gly Ala Tyr Asp Ile Ile Cys Asp Glu Cys His Ser Thr		
	500	505	510
70	gac tcg acc act atc ctg ggc atc ggc aca gtc ctg gac caa gcg gag		3385
	Asp Ser Thr Thr Ile Leu Gly Ile Gly Thr Val Leu Asp Gln Ala Glu		

	515	520	525	
	acg gct gga gcg cga ctc gtc gtg ctc gcc acc gct acg cct ccg gga			3433
5	Thr Ala Gly Ala Arg Leu Val Val Leu Ala Thr Ala Thr Pro Pro Gly			
	530	535	540	
	tcg gtc acc gtg cca cat cca aac atc gag gag gtg gct ctg tcc agc			3481
	Ser Val Thr Val Pro His Pro Asn Ile Glu Glu Val Ala Leu Ser Ser			
10	545	550	555	560
	act gga gaa atc ccc ttt tat ggc aaa gcc atc ccc atc gag acc atc			3529
	Thr Gly Glu Ile Pro Phe Tyr Gly Lys Ala Ile Pro Ile Glu Thr Ile			
	565	570	575	
15	aag ggg ggg agg cac ctc att ttc tgc cat tcc aag aag aaa tgt gat			3577
	Lys Gly Gly Arg His Leu Ile Phe Cys His Ser Lys Lys Lys Cys Asp			
	580	585	590	
20	gag ctc gcc gcg aag ctg tcc ggc ctc gga ctc aat gct gta gca tat			3625
	Glu Leu Ala Ala Lys Leu Ser Gly Leu Gly Leu Asn Ala Val Ala Tyr			
	595	600	605	
25	tac cgg ggc ctt gat gta tcc gtc ata cca act acg gga gac gtc att			3673
	Tyr Arg Gly Leu Asp Val Ser Val Ile Pro Thr Ser Gly Asp Val Ile			
	610	615	620	
	gtc gta gca acg gac gct cta atg acg ggc ttt acc ggc gat ttc gac			3721
	Val Val Ala Thr Asp Ala Leu Met Thr Gly Phe Thr Gly Asp Phe Asp			
	625	630	635	640
30	tca gtg atc gac tgc aat aca tgt gtc acc cag aca gtc gac ttc acg			3769
	Ser Val Ile Asp Cys Asn Thr Cys Val Thr Gln Thr Val Asp Phe Ser			
	645	650	655	
35	ctg gac ccg acc ttc acc att gag acg acg acc gtg cca caa gac gcg			3817
	Leu Asp Pro Thr Phe Thr Ile Glu Thr Thr Val Pro Gln Asp Ala			
	660	665	670	
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	Val Ser Arg Ser Gln Arg Arg Gly Arg Thr Gly Arg Gly Arg Met Gly			
	675	680	685	
45	att tac agg ttt gtg act cca gga gaa cgg ccc tcg ggc atg ttc gat			3913
	Ile Tyr Arg Phe Val Thr Pro Gly Glu Arg Pro Ser Gly Met Phe Asp			
	690	695	700	
	tcc tcg gtt ctg tgc gag tgc tat gac gcg ggc tgt gct tgg tac gag			3961
	Ser Ser Val Leu Cys Glu Cys Tyr Asp Ala Gly Cys Ala Trp Tyr Glu			
	705	710	715	720
50	ctc acg ccc gcc gag acc tca gtt agg ttg cgg gct tac cta aac aca			4009
	Leu Thr Pro Ala Glu Thr Ser Val Arg Leu Arg Ala Tyr Leu Asn Thr			
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55	cca ggg ttg ccc gtc tgc cag gac cat ctg gag ttc tgg gag agc gtc			4057
	Pro Gly Leu Pro Val Cys Gln Asp His Leu Glu Phe Trp Glu Ser Val			
	740	745	750	

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	Phe Thr Gly Leu Thr His Ile Asp Ala His Phe Leu Ser Gln Thr Lys	
	755	760
5		765
	cag gca gga gac aac ttc ccc tac ctg gta gca tac cag gct acg gtg	4153
	Gln Ala Gly Asp Asn Phe Pro Tyr Leu Val Ala Tyr Gln Ala Thr Val	
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	780	
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	Cys Ala Arg Ala Gln Ala Pro Pro Ser Trp Asp Gln Met Trp Lys	
	785	790
	795	800
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	Cys Leu Ile Arg Leu Lys Pro Thr Leu His Gly Pro Thr Pro Leu Leu	
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	815	
20	tat agg ctg gga gcc gtt caa aac gag gtt act acc aca cac ccc ata	4297
	Tyr Arg Leu Gly Ala Val Gln Asn Glu Val Thr Thr His Pro Ile	
	820	825
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	acc aaa tac atc atg gca tgc atg tcg gct gac ctg gag gtc gtc acg	4345
	Thr Lys Tyr Ile Met Ala Cys Met Ser Ala Asp Leu Glu Val Val Thr	
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	845	
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	Ser Thr Trp Val Leu Val Gly Gly Val Leu Ala Ala Leu Ala Ala Tyr	
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	860	
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	Cys Leu Thr Thr Gly Ser Val Val Ile Val Gly Arg Ile Ile Leu Ser	
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	875	880
35	gga arg ccg gcc atc att ccc gac agg gaa gtc ctt tac cgg gag ttc	4489
	Gly Xaa Pro Ala Ile Ile Pro Asp Arg Glu Val Leu Tyr Arg Glu Phe	
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	895	
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	Asp Glu Met Glu Glu Cys Ala Ser His Leu Pro Tyr Ile Glu Gln Gly	
	900	905
	910	
	atg cag ctc gcc gaa caa ttc aaa cag aag gca atc ggg ttg ctg caa	4585
	Met Gln Leu Ala Glu Gln Phe Lys Gln Lys Ala Ile Gly Leu Leu Gln	
	915	920
	925	
45	aca gcc acc aag caa gcg gag gct gct ccc gtg gtg gaa tcc aag	4633
	Thr Ala Thr Lys Gln Ala Glu Ala Ala Ala Pro Val Val Glu Ser Lys	
	930	935
	940	
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	Trp Arg Thr Leu Glu Ala Phe Trp Ala Lys His Met Trp Asn Phe Ile	
	945	950
	955	960
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	Ser Gly Ile Gln Tyr Leu Ala Gly Leu Ser Thr Leu Pro Gly Asn Pro	
	965	970
	975	

	gcg ata gca tca ctg atg gca ttc aca gcc tct atc acc agc ccg ctc	4777		
	Ala Ile Ala Ser Leu Met Ala Phe Thr Ala Ser Ile Thr Ser Pro Leu			
	980	990		
5	acc acc caa cat acc ctc ctg ttt aac atc ctg ggg gga tgg gtg gcc	4825		
	Thr Thr Gln His Thr Leu Leu Phe Asn Ile Leu Gly Gly Trp Val Ala			
	995	1000	1005	
10	gcc caa ctt gct cct ccc agc gct gct tct gta ggc gcc ggc	4873		
	Ala Gln Leu Ala Pro Pro Ser Ala Ala Ser Ala Phe Val Gly Ala Gly			
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15	atc gct gga gcg gct gtt ggc agc ata ggc ctt ggg aag gtg ctt gtg	4921		
	Ile Ala Gly Ala Ala Val Gly Ser Ile Gly Leu Gly Lys Val Leu Val			
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20	gat att ttg gca ggt tat gga gca ggg gtg gca ggc gcg ctc gtg gcc	4969		
	Asp Ile Leu Ala Gly Tyr Gly Ala Gly Val Ala Gly Ala Leu Val Ala			
	1045	1050	1055	
	ttt aag gtc atg agc ggc gag atg ccc tcc acc gag gac ctg gtt aac	5017		
	Phe Lys Val Met Ser Gly Glu Met Pro Ser Thr Glu Asp Leu Val Asn			
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25	cta ctc cct gct atc ctc tcc cct ggc gcc cta gtc gtc ggg gtc gtg	5065		
	Leu Leu Pro Ala Ile Leu Ser Pro Gly Ala Leu Val Val Gly Val Val			
	1075	1080	1085	
30	tgc gca gcg ata ctg cgt cggt cac gtg ggc cca ggg gag ggg gct gtg	5113		
	Cys Ala Ala Ile Leu Arg Arg His Val Gly Pro Gly Glu Gly Ala Val			
	1090	1095	1100	
35	cag tgg atg aac cgg ctg ata gcg ttc gct tcg cgg ggt aac cac gtc	5161		
	Gln Trp Met Asn Arg Leu Ile Ala Phe Ala Ser Arg Gly Asn His Val			
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	tcc ccc acg cac tat gtg cct gag agc gac gct gca gca cgt gtc act	5209		
	Ser Pro Thr His Tyr Val Pro Glu Ser Asp Ala Ala Arg Val Thr			
	1125	1130	1135	
40	cag atc ctc tct agt ctt acc atc act cag ctg ctg aag agg ctt cac	5257		
	Gln Ile Leu Ser Ser Leu Thr Ile Thr Gln Leu Leu Lys Arg Leu His			
	1140	1145	1150	
45	cag tgg atc aac gag gac tgc tcc acg cca tgc tcc ggc tcg tgg cta	5305		
	Gln Trp Ile Asn Glu Asp Cys Ser Thr Pro Cys Ser Trp Leu			
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50	aga gat gtt tgg gat tgg ata tgc acg gtg ttg act gat ttc aag acc	5353		
	Arg Asp Val Trp Asp Trp Ile Cys Thr Val Leu Thr Asp Phe Lys Thr			
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55	tgg ctc cag tcc aag ctc ctg ccg cga ttg ccg gga gtc ccc ttc ttc	5401		
	Trp Leu Gln Ser Lys Leu Leu Pro Arg Leu Pro Gly Val Pro Phe Phe			
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	tca tgt caa cgt ggg tac aag gga gtc tgg ccg ggc gac ggc atc atg	5449		

	Ser Cys Gln Arg Gly Tyr Lys Gly Val Trp Arg Gly Asp Gly Ile Met		
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5	caa acc acc tgc cca tgt gga gca cag atc acc gga cat gtg aaa aac		5497
	Gln Thr Thr Cys Pro Cys Gly Ala Gln Ile Thr Gly His Val Lys Asn		
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	Cys Ser Met Arg Ile Val Gly Pro Arg Thr Cys Ser Asn Thr Trp His		
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	Gly Thr Phe Pro Ile Asn Ala Tyr Thr Thr Gly Pro Cys Thr Pro Ser		
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	ccg gcg cca aat tat tct agg gcg ctg tgg cgg gtg gct gct gag gag		5641
	Pro Ala Pro Asn Tyr Ser Arg Ala Leu Trp Arg Val Ala Ala Glu Glu		
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	Tyr Val Glu Val Thr Arg Val Gly Asp Phe His Tyr Val Thr Gly Met		
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	Thr Thr Asp Asn Val Lys Cys Pro Cys Gln Val Pro Ala Pro Glu Phe		
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	Phe Thr Glu Val Asp Gly Val Arg Leu His Arg Tyr Ala Pro Ala Cys		
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	Lys Pro Leu Leu Arg Glu Val Thr Phe Leu Val Gly Leu Asn Gln		
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	tac ctg gtt ggg tca cag ctc cca tgc gag ccc gaa ccg gac gta gca		5881
	Tyr Leu Val Gly Ser Gln Leu Pro Cys Glu Pro Glu Pro Asp Val Ala		
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	Val Leu Thr Ser Met Leu Thr Asp Pro Ser His Ile Thr Ala Glu Thr		
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	Ala Lys Arg Arg Leu Ala Arg Gly Ser Pro Pro Ser Leu Ala Ser Ser		
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	Ser Ala Ser Gln Leu Ser Ala Pro Ser Leu Lys Ala Thr Cys Thr Thr		
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	Arg His Asp Ser Pro Asp Ala Asp Leu Ile Glu Ala Asn Leu Leu Trp		
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	Arg Gln Glu Met Gly Gly Asn Ile Thr Arg Val Glu Ser Glu Asn Lys		

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	Val Val Ile Leu Asp Ser Phe Glu Pro Leu Gln Ala Glu Glu Asp Glu				
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	Arg Glu Val Ser Val Pro Ala Glu Ile Leu Arg Arg Ser Arg Lys Phe				
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	Pro Arg Ala Met Pro Ile Trp Ala Arg Pro Asp Tyr Asn Pro Pro Leu				
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	Xaa Glu Ser Trp Lys Asp Pro Asp Tyr Val Pro Pro Val Val His Gly				
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	Cys Pro Leu Pro Pro Ala Lys Ala Pro Pro Ile Pro Pro Pro Arg Arg				
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25	aag agg acg gtt gtc ctg tca gaa tct acc gtg tct tct gcc ttg gcg				6409
	Lys Arg Thr Val Val Leu Ser Glu Ser Thr Val Ser Ser Ala Leu Ala				
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	Glu Leu Ala Thr Lys Thr Phe Gly Ser Ser Glu Ser Ser Ala Val Asp				
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	Ser Gly Thr Ala Thr Ala Ser Pro Asp Gln Pro Ser Asp Asp Gly Asp				
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	Ala Gly Ser Asp Val Glu Ser Tyr Ser Ser Met Pro Pro Leu Glu Gly				
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45	gag ccg ggg gat ccc gat ctc agc gac ggg tct tgg tct acc gta agc				6601
	Glu Pro Gly Asp Pro Asp Leu Ser Asp Gly Ser Trp Ser Thr Val Ser				
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	Glu Glu Ala Ser Glu Asp Val Val Cys Cys Ser Met Ser Tyr Thr Trp				
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	Thr Gly Ala Leu Ile Thr Pro Cys Ala Ala Glu Glu Thr Lys Leu Pro				
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	atc aat gca ctg agc aac tct ttg ctc cgt cac cac aac ttg gtc tat				6745
	Ile Asn Ala Leu Ser Asn Ser Leu Leu Arg His His Asn Leu Val Tyr				
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	gct aca aca tct cgc agc gca agc ctg cgg cag aag aag gtc acc ttt				6793
	Ala Thr Thr Ser Arg Ser Ala Ser Leu Arg Gln Lys Lys Val Thr Phe				
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	gac aga ctg cag gtc ctg gac gac cac tac cg	gac gtg ctc aag gag	6841
	Asp Arg Leu Gln Val Leu Asp Asp His Tyr Arg Asp Val Leu Lys Glu		
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	Met Lys Ala Lys Ala Ser Thr Val Lys Ala Lys Leu Leu Ser Val Glu		
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	Glu Ala Cys Lys Leu Thr Pro Pro His Ser Ala Arg Ser Lys Phe Gly		
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	Tyr Gly Ala Lys Asp Val Arg Asn Leu Ser Ser Lys Ala Val Asn His		
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	atc cgc tcc gtg tgg aag gac ttg ctg gaa gac act gag aca cca att	7033	
	Ile Arg Ser Val Trp Lys Asp Leu Leu Glu Asp Thr Glu Thr Pro Ile		
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	gac acc acc atc atg gca aaa aat gag gtt ttc tgc gtc caa cca gag	7081	
	Asp Thr Thr Ile Met Ala Lys Asn Glu Val Phe Cys Val Gln Pro Glu		
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			1760
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	Lys Gly Gly Arg Lys Pro Ala Arg Leu Ile Val Phe Pro Asp Leu Gly		
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	Val Arg Val Cys Glu Lys Met Ala Leu Tyr Asp Val Val Ser Thr Leu		
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	cct cag gcc gtg atg ggc tct tca tac gga ttc caa tac tct cct gga	7225	
	Pro Gln Ala Val Met Gly Ser Ser Tyr Gly Phe Gln Tyr Ser Pro Gly		
	1795	1800	1805
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	atg ggc ttc gca tat gac acc cgc tgt ttt gac tca acg gtc act gag	7321	
	Met Gly Phe Ala Tyr Asp Thr Arg Cys Phe Asp Ser Thr Val Thr Glu		
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	aat gac atc cgt gtt gag gag tca atc tac caa tgt tgt gac ttg gcc	7369	
	Asn Asp Ile Arg Val Glu Glu Ser Ile Tyr Gln Cys Cys Asp Leu Ala		
	1845	1850	1855
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	ccc gaa gcc aga cag gcc ata agg tcg ctc aca gag cg	7417	
	Pro Glu Ala Arg Gln Ala Ile Arg Ser Leu Thr Glu Arg Leu Tyr Ile		
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10	tgc acg atg ctc gta tgc gga gac gac ctt gtc gtt atc tgt gaa agc Cys Thr Met Leu Val Cys Gly Asp Asp Leu Val Val Ile Cys Glu Ser 1925 1930 1935	7609
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	tca tgc ctc agg aaa ctt ggg gta cc ^g ccc ttg cga gtc tgg aga cat Ser Cys Leu Arg Lys Leu Gly Val Pro Pro Leu Arg Val Trp Arg His 2100 2105 2110	8137
	cgg gcc aga agt gtc cgc gct agg cta ctg tcc cag ggg ggg agg gct	8185

	Arg Ala Arg Ser Val Arg Ala Arg Leu Leu Ser Gln Gly Gly Arg Ala			
	2115	2120	2125	
	gcc act tgt ggc aag tac ctc ttc aac tgg gca gta agg acc aag ctc			8233
5	Ala Thr Cys Gly Lys Tyr Leu Phe Asn Trp Ala Val Arg Thr Lys Leu			
	2130	2135	2140	
	aaa ctc act cca atc ccg gct gcg tcc cag ttg gat tta tcc agc tgg			8281
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	Phe Val Ala Gly Tyr Ser Gly Gly Asp Ile Tyr His Ser Leu Ser Arg			
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	Ala Arg Pro Arg Trp Phe Met Trp Cys Leu Leu Leu Ser Val Gly			
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	Val Gly Ile Tyr Leu Leu Pro Asn Arg *			
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	20 25 30	
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	Leu Ile Trp Trp Leu Gln Tyr Phe Ile Thr Arg Ala Glu Ala His Leu	
	35 40 45	
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	Lys Ile Leu Leu Ala Ile Leu Gly Pro Leu Met Val Leu Gln Ala Gly	
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	Ile Thr Lys Val Pro Tyr Phe Val Arg Ala His Gly Leu Ile Arg Ala	
	100 105 110	
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	Cys Met Leu Val Arg Lys Val Ala Gly Gly His Tyr Val Gln Met Ala	
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	Leu Met Lys Leu Ala Ala Leu Thr Gly Thr Tyr Val Tyr Asp His Leu	
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	Thr Pro Leu Arg Asp Trp Ala His Ala Gly Leu Arg Asp Leu Ala Val	
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	Trp Gly Ala Asp Thr Ala Ala Cys Gly Asp Ile Ile Leu Gly Leu Pro	

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	ctt gaa ggg cag ggg tgg cga ctc ctc gcg cct att acg gcc tac tcc Leu Glu Gly Gln Gly Trp Arg Leu Leu Ala Pro Ile Thr Ala Tyr Ser 210	215	220	2473
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25	tat cat ggt gcc ggc tca aag acc ctt gcc ggc cca aag ggc cca atc Tyr His Gly Ala Gly Ser Lys Thr Leu Ala Gly Pro Lys Gly Pro Ile 275	280	285	2665
30	acc caa atg tac acc aat gtg gac cag gac ctc gtc ggc tgg caa gcg Thr Gln Met Tyr Thr Asn Val Asp Gln Asp Leu Val Gly Trp Gln Ala 290	295	300	2713
35	ccc ccc ggg gcg cgt tcc ttg aca cca tgc acc tgc ggc agc tcg gac Pro Pro Gly Ala Arg Ser Leu Thr Pro Cys Thr Cys Gly Ser Ser Asp 305	310	315	2761
40	ctt tac ttg gtc acg aag cat gcc gat gtc att ccg gtg cgc cgg cgg Leu Tyr Leu Val Thr Lys His Ala Asp Val Ile Pro Val Arg Arg Arg 325	330	335	2809
45	ggc gac agc agg ggg agc cta ctc tcc ccc cgg ccc gtc tcc tac ttg Gly Asp Ser Arg Gly Ser Leu Leu Ser Pro Arg Pro Val Ser Tyr Leu 340	345	350	2857
	aag ggc tct tcg ggc ggt cca ctg ctc tgc ccc tcg ggg cac gct gtg Lys Gly Ser Ser Gly Gly Pro Leu Leu Cys Pro Ser Gly His Ala Val 355	360	365	2905
50	ggc atc ttt cgg gct gcc gtg tgc acc cga ggg gtt gcg aag gcg gtg Gly Ile Phe Arg Ala Ala Val Cys Thr Arg Gly Val Ala Lys Ala Val 370	375	380	2953
	gac ttt gta ccc gtc gag tct atg gaa acc act atg cgg tcc ccg gtc Asp Phe Val Pro Val Glu Ser Met Glu Thr Thr Met Arg Ser Pro Val 385	390	395	3001
55	ttc acg gac aac tcg tcc cct ccg gcc gta ccg cag aca ttc cag gtg Phe Thr Asp Asn Ser Ser Pro Pro Ala Val Pro Gln Thr Phe Gln Val 405	410	415	3049

	gcc cat cta cac gcc cct act ggt agc ggc aag agc act aag gtg ccg	3097
	Ala His Leu His Ala Pro Thr Gly Ser Gly Lys Ser Thr Lys Val Pro	
	420 425 430	
5	gct gcg tat gca gcc caa ggg tat aag gtg ctt gtc ctg aac ccg tcc	3145
	Ala Ala Tyr Ala Ala Gln Gly Tyr Lys Val Leu Val Leu Asn Pro Ser	
	435 440 445	
10	gtc gcc gcc acc cta ggt ttc ggg gcg tat atg tct aag gca cat ggt	3193
	Val Ala Ala Thr Leu Gly Phe Gly Ala Tyr Met Ser Lys Ala His Gly	
	450 455 460	
15	atc gac cct aac atc aga acc ggg gta agg acc atc acc acg ggt gcc	3241
	Ile Asp Pro Asn Ile Arg Thr Gly Val Arg Thr Ile Thr Thr Gly Ala	
	465 470 475 480	
20	ccc atc acg tac tcc acc tat ggc aag ttt ctt gcc gac ggt ggt tgc	3289
	Pro Ile Thr Tyr Ser Thr Tyr Gly Lys Phe Leu Ala Asp Gly Gly Cys	
	485 490 495	
	tct ggg ggc gcc tat gac atc ata ata tgt gat gag tgc cac tca act	3337
	Ser Gly Gly Ala Tyr Asp Ile Ile Cys Asp Glu Cys His Ser Thr	
	500 505 510	
25	gac tcg acc act atc ctg ggc atc ggc aca gtc ctg gac caa gcg gag	3385
	Asp Ser Thr Thr Ile Leu Gly Ile Gly Thr Val Leu Asp Gln Ala Glu	
	515 520 525	
30	acg gct gga gcg cga ctc gtc gtg ctc gcc acc gct acg cct ccg gga	3433
	Thr Ala Gly Ala Arg Leu Val Val Leu Ala Thr Ala Thr Pro Pro Gly	
	530 535 540	
35	tcg gtc acc gtg cca cat cca aac atc gag gag gtg gct ctg tcc agc	3481
	Ser Val Thr Val Pro His Pro Asn Ile Glu Glu Val Ala Leu Ser Ser	
	545 550 555 560	
40	act gga gaa atc ccc ttt tat ggc aaa gcc atc ccc atc gag acc atc	3529
	Thr Gly Glu Ile Pro Phe Tyr Gly Lys Ala Ile Pro Ile Glu Thr Ile	
	565 570 575	
	aag ggg ggg agg cac ctc att ttc tgc cat tcc aag aag aaa tgt gat	3577
	Lys Gly Gly Arg His Leu Ile Phe Cys His Ser Lys Lys Cys Asp	
	580 585 590	
45	gag ctc gcc gcg aag ctg tcc ggc ctc gga ctc aat gct gta gca tat	3625
	Glu Leu Ala Ala Lys Leu Ser Gly Leu Gly Leu Asn Ala Val Ala Tyr	
	595 600 605	
50	tac cggtt gat gta tcc gtc ata cca act agc gga gac gtc att	3673
	Tyr Arg Gly Leu Asp Val Ser Val Ile Pro Thr Ser Gly Asp Val Ile	
	610 615 620	
55	gtc gta gca acg gac gct cta atg acg ggc ttt acc ggc gat ttc gac	3721
	Val Val Ala Thr Asp Ala Leu Met Thr Gly Phe Thr Gly Asp Phe Asp	
	625 630 635 640	

	tca gtg atc gac tgc aat aca tgt gtc acc cag aca gtc gac ttc agc Ser Val Ile Asp Cys Asn Thr Cys Val Thr Gln Thr Val Asp Phe Ser	3769
	645 650 655	
5	ctg gac ccg acc ttc acc att gag acg acg acc gtg cca caa gac gcg Leu Asp Pro Thr Phe Thr Ile Glu Thr Thr Val Pro Gln Asp Ala	3817
	660 665 670	
10	gtg tca cgc tcg cag cgg cga ggc agg act ggt agg ggc agg atg ggc Val Ser Arg Ser Gln Arg Arg Gly Arg Thr Gly Arg Gly Arg Met Gly	3865
	675 680 685	
15	att tac agg ttt gtg act cca gga gaa cgg ccc tcg ggc atg ttc gat Ile Tyr Arg Phe Val Thr Pro Gly Glu Arg Pro Ser Gly Met Phe Asp	3913
	690 695 700	
20	tcc tcg gtt ctg tgc gag tgc tat gac gcg ggc tgt gct tgg tac gag Ser Ser Val Leu Cys Glu Cys Tyr Asp Ala Gly Cys Ala Trp Tyr Glu	3961
	705 710 715 720	
25	ctc acg ccc gcc gag acc tca gtt agg ttg cgg gct tac cta aac aca Leu Thr Pro Ala Glu Thr Ser Val Arg Leu Arg Ala Tyr Leu Asn Thr	4009
	725 730 735	
30	cca ggg ttg ccc gtc tgc cag gac cat ctg gag ttc tgg gag ggc gtc Pro Gly Leu Pro Val Cys Gln Asp His Leu Glu Phe Trp Glu Gly Val	4057
	740 745 750	
35	ttt aca ggc ctc acc cac ata gac gcc cat ttc ttg tcc cag act aag Phe Thr Gly Leu Thr His Ile Asp Ala His Phe Leu Ser Gln Thr Lys	4105
	755 760 765	
40	cag gca gga gac aac ttc ccc tac ctg gta gca tac cag gct acg gtg Gln Ala Gly Asp Asn Phe Pro Tyr Leu Val Ala Tyr Gln Ala Thr Val	4153
	770 775 780	
45	tgc gcc agg gct cag gct cca cct cca tcg tgg gac caa atg tgg aag Cys Ala Arg Ala Gln Ala Pro Pro Pro Ser Trp Asp Gln Met Trp Lys	4201
	785 790 795 800	
50	tgt ctc ata cgg cta aag cct acg ctg cac ggg cca acg ccc ctg ctg Cys Leu Ile Arg Leu Lys Pro Thr Leu His Gly Pro Thr Pro Leu Leu	4249
	805 810 815	
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	820 825 830	
60	acc aaa tac atc atg gca tgc atg tcg gct gac ctg gag gtc gtc acg Thr Lys Tyr Ile Met Ala Cys Met Ser Ala Asp Leu Glu Val Val Thr	4345
	835 840 845	
65	agc acc tgg gtg ctg gta ggc gga gtc cta gca gct ctg gcc gcg tat Ser Thr Trp Val Leu Val Gly Gly Val Leu Ala Ala Leu Ala Ala Tyr	4393
	850 855 860	
70	tgc ctg aca aca ggc agc gtg gtc att gtg ggc agg atc atc ttg tcc	4441

	Cys Leu Thr Thr Gly Ser Val Val Ile Val Gly Arg Ile Ile Leu Ser		
865	870	875	880
5	gga agg ccg gcc atc att ccc gac agg gaa gtc ctt tac cg ^g gag ttc Gly Arg Pro Ala Ile Ile Pro Asp Arg Glu Val Leu Tyr Arg Glu Phe		4489
	885	890	895
10	gat gag atg gaa gag tgc gcc tca cac ctc cct tac atc gaa cag gga Asp Glu Met Glu Glu Cys Ala Ser His Leu Pro Tyr Ile Glu Gln Gly		4537
	900	905	910
15	atg cag ctc gcc gaa caa ttc aaa cag aag gca atc ggg ttg ctg caa Met Gln Leu Ala Glu Gln Phe Lys Gln Lys Ala Ile Gly Leu Leu Gln		4585
	915	920	925
20	aca gcc acc aag caa gcg gag gct gct ccc gtg gtg gaa tcc aag Thr Ala Thr Lys Gln Ala Glu Ala Ala Pro Val Val Glu Ser Lys		4633
	930	935	940
25	tgg cgg acc ctc gaa gcc ttc tgg gcg aag cat atg tgg aat ttc atc Trp Arg Thr Leu Glu Ala Phe Trp Ala Lys His Met Trp Asn Phe Ile		4681
	945	950	955
30	965 970 975		
35	agc ggg ata caa tat tta gca ggc ttg tcc act ctg cct ggc aac ccc Ser Gly Ile Gln Tyr Leu Ala Gly Leu Ser Thr Leu Pro Gly Asn Pro		4729
	965	970	975
40	gcg ata gca tca ctg atg gca ttc aca gcc tct atc acc agc ccg ctc Ala Ile Ala Ser Leu Met Ala Phe Thr Ala Ser Ile Thr Ser Pro Leu		4777
	980	985	990
45	acc acc caa cat acc ctc ctg ttt aac atc ctg ggg gga tgg gtg gcc Thr Thr Gln His Thr Leu Leu Phe Asn Ile Leu Gly Gly Trp Val Ala		4825
	995	1000	1005
50	1010 1015 1020		
55	gcc caa ctt gct cct ccc agc gct gct tcc gct ttc gta ggc gcc ggc Ala Gln Leu Ala Pro Pro Ser Ala Ala Ser Ala Phe Val Gly Ala Gly		4873
	1025	1030	1035
60	1040		
65	atc gct gga gcg gct gtt ggc agc ata ggc ctt ggg aag gtg ctt gtg Ile Ala Gly Ala Ala Val Gly Ser Ile Gly Leu Gly Lys Val Leu Val		4921
	1045	1050	1055
70	ttt aag gtc atg agc ggc gag atg ccc tcc acc gag gac ctg gtt aac Phe Lys Val Met Ser Gly Glu Met Pro Ser Thr Glu Asp Leu Val Asn		5017
	1060	1065	1070
75	1075 1080 1085		
80	cta ctc cct gct atc ctc tcc cct ggc gcc cta gtc gtc ggg gtc gtg Leu Leu Pro Ala Ile Leu Ser Pro Gly Ala Leu Val Val Gly Val Val		5065
	1085		
85	tgc gca gcg ata ctg cgt cgg cac gtg ggc cca ggg gag ggg gct gtg Cys Ala Ala Ile Leu Arg Arg His Val Gly Pro Gly Glu Gly Ala Val		5113

	1090	1095	1100	
	cag tgg atg aac cg ^g ctg ata gc ^g ttc gct tc ^g cg ^g ggt aac cac gtc			5161
	Gln Trp Met Asn Arg Leu Ile Ala Phe Ala Ser Arg Gly Asn His Val			
5	1105	1110	1115	1120
	tcc ccc acg cac tat gt ^g cct gag agc gac gct gca gca cgt gtc act			5209
	Ser Pro Thr His Tyr Val Pro Glu Ser Asp Ala Ala Arg Val Thr			
	1125	1130	1135	
10	cag atc ctc tct agt ctt acc atc act cag ctg ctg aag agg ctt cac			5257
	Gln Ile Leu Ser Ser Leu Thr Ile Thr Gln Leu Leu Lys Arg Leu His			
	1140	1145	1150	
15	cag tgg atc aac gag gac tgc tcc acg cca tgc tcc ggc tc ^g tgg cta			5305
	Gln Trp Ile Asn Glu Asp Cys Ser Thr Pro Cys Ser Gly Ser Trp Leu			
	1155	1160	1165	
20	aga gat gtt tgg gat tgg ata tgc acg gt ^g ttg act gat ttc aag gcc			5353
	Arg Asp Val Trp Asp Trp Ile Cys Thr Val Leu Thr Asp Phe Lys Ala			
	1170	1175	1180	
25	tgg ctc cag tcc aag ctc ctg cc ^g cga ttg cc ^g gga gtc ccc tt ^c tt ^c			5401
	Trp Leu Gln Ser Lys Leu Leu Pro Arg Leu Pro Gly Val Pro Phe Phe			
	1185	1190	1195	1200
30	tca tgt caa cgt ggg tac aag gga gtc tgg cc ^g ggc gac ggc atc atg			5449
	Ser Cys Gln Arg Gly Tyr Lys Gly Val Trp Arg Gly Asp Gly Ile Met			
	1205	1210	1215	
35	caa acc acc tgc cca tgt gga gca cag atc acc gga cat gt ^g aaa aac			5497
	Gln Thr Thr Cys Pro Cys Gly Ala Gln Ile Thr Gly His Val Lys Asn			
	1220	1225	1230	
40	tgt tcc atg agg atc gt ^g ggg cct agg acc tgt agt aac acg tgg cat			5545
	Cys Ser Met Arg Ile Val Gly Pro Arg Thr Cys Ser Asn Thr Trp His			
	1235	1240	1245	
45	gga aca ttc ccc att aac gc ^g tac acc acg ggc ccc tgc acg ccc tcc			5593
	Gly Thr Phe Pro Ile Asn Ala Tyr Thr Gly Pro Cys Thr Pro Ser			
	1250	1255	1260	
50	cc ^g gc ^g cca aat tat tct agg gc ^g ctg tgg cc ^g gt ^g gct gct gag gag			5641
	Pro Ala Pro Asn Tyr Ser Arg Ala Leu Trp Arg Val Ala Ala Glu Glu			
	1265	1270	1275	1280
55	tac gt ^g gag gtt acg cga gt ^g ggg gat ttc cac tac gt ^g acg ggc atg			5689
	Tyr Val Glu Val Thr Arg Val Gly Asp Phe His Tyr Val Thr Gly Met			
	1285	1290	1295	
60	acc act gac aac gta aag tgc cc ^g tgt cag gtt cc ^g gcc ccc gaa tt ^c			5737
	Thr Thr Asp Asn Val Lys Cys Pro Cys Gln Val Pro Ala Pro Glu Phe			
	1300	1305	1310	
65	ttc aca gaa gt ^g gat ggg gt ^g cg ^g tt ^c cac agg tac gct cca gc ^g tgc			5785
	Phe Thr Glu Val Asp Gly Val Arg Leu His Arg Tyr Ala Pro Ala Cys			
	1315	1320	1325	

	aaa ccc ctc cta cg ^g gag gag gtc aca ttc ctg gtc ggg ctc aat caa Lys Pro Leu Leu Arg Glu Glu Val Thr Phe Leu Val Gly Leu Asn Gln 1330 1335 1340	5833
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25	cgt cat gac tcc ccg gac gct gac ctc atc gag gcc aac ctc ctg tgg Arg His Asp Ser Pro Asp Ala Asp Leu Ile Glu Ala Asn Leu Leu Trp 1410 1415 1420	6073
30	cgg cag gag atg ggc ggg aac atc acc cgc gtg gag tca gaa aat aag Arg Gln Glu Met Gly Gly Asn Ile Thr Arg Val Glu Ser Glu Asn Lys 1425 1430 1435 1440	6121
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45	cct cga gc ^g atg ccc ata tgg gca cgc cc ^g gat tac aac cct cca ctg Pro Arg Ala Met Pro Ile Trp Ala Arg Pro Asp Tyr Asn Pro Pro Leu 1475 1480 1485	6265
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	Glu Pro Gly Asp Pro Asp Leu Ser Asp Gly Ser Trp Ser Thr Val Ser	
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	Glu Glu Ala Ser Glu Asp Val Val Cys Cys Ser Met Ser Tyr Thr Trp	
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	Thr Gly Ala Leu Ile Thr Pro Cys Ala Ala Glu Glu Thr Lys Leu Pro	
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	Ile Asn Ala Leu Ser Asn Ser Leu Leu Arg His His Asn Leu Val Tyr	
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	Ala Thr Thr Ser Arg Ser Ala Ser Leu Arg Gln Lys Lys Val Thr Phe	
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	Asp Arg Leu Gln Val Leu Asp Asp His Tyr Arg Asp Val Leu Lys Glu	
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	Met Lys Ala Lys Ala Ser Thr Val Lys Ala Lys Leu Leu Ser Val Glu	
	1685 1690 1695	
	gaa gcc tgt aag ctg acg ccc cca cat tcg gcc aga tct aaa ttt ggc	6937
	Glu Ala Cys Lys Leu Thr Pro Pro His Ser Ala Arg Ser Lys Phe Gly	
	1700 1705 1710	
40	tat ggg gca aag gac gtc cgg aac cta tcc agc aag gcc gtt aac cac	6985
	Tyr Gly Ala Lys Asp Val Arg Asn Leu Ser Ser Lys Ala Val Asn His	
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	Ile Arg Ser Val Trp Lys Asp Leu Leu Glu Asp Thr Glu Thr Pro Ile	
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	Lys Gly Gly Arg Lys Pro Ala Arg Leu Ile Val Phe Pro Asp Leu Gly	
	1765 1770 1775	
	gtt cgt gtg tgc gag aaa atg gcc ctt tac gat gtg gtc tcc acc ctc	7177

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	1795	1800	1805
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	1810	1815	1820
15	atg ggc ttc gca tat gac acc cgc tgt ttt gac tca acg gtc act gag Met Gly Phe Ala Tyr Asp Thr Arg Cys Phe Asp Ser Thr Val Thr Glu		7321
	1825	1830	1835
	1840		
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	1845	1850	1855
25	ccc gaa gcc aga cag gcc ata agg tcg ctc aca gag cggtt tac atc Pro Glu Ala Arg Gln Ala Ile Arg Ser Leu Thr Glu Arg Leu Tyr Ile		7417
	1860	1865	1870
	1875	1880	1885
30	tgc cgc gcg agc ggt gta ctg acg acc agc tgc ggt aat acc ctc aca Cys Arg Ala Ser Gly Val Leu Thr Thr Ser Cys Gly Asn Thr Leu Thr		7513
	1890	1895	1900
	1905	1910	1915
35	tgt tac ttg aag gcc gct gcg gcc tgt cga gct gcg aag ctc cag gac Cys Tyr Leu Lys Ala Ala Ala Cys Arg Ala Ala Lys Leu Gln Asp		7561
	1920		
	1925	1930	1935
40	tgc acg atg ctc gta tgc gga gac gac ctt gtc gtt atc tgt gaa agc Cys Thr Met Leu Val Cys Gly Asp Asp Leu Val Val Ile Cys Glu Ser		7609
	1940	1945	1950
	1955	1960	1965
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	1970	1975	1980
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	1985	1990	1995
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	1995	2000	
	2000		
	7849		

	2005	2010	2015	
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5	2020	2025	2030	
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	2035	2040	2045	
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	2050	2055	2060	
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	2065	2070	2075	2080
20	gca ttt tca ctc cat agt tac tct cca ggt gag atc aat agg gtg gct Ala Phe Ser Leu His Ser Tyr Ser Pro Gly Glu Ile Asn Arg Val Ala			8089
	2085	2090	2095	
25	tca tgc ctc agg aaa ctt ggg gta ccg ccc ttg cga gtc tgg aga cat Ser Cys Leu Arg Lys Leu Gly Val Pro Pro Leu Arg Val Trp Arg His			8137
	2100	2105	2110	
	cgg gcc aga agt gtc cgc gct agg cta ctg tcc cag ggg ggg agg gct Arg Ala Arg Ser Val Arg Ala Arg Leu Leu Ser Gln Gly Arg Ala			8185
	2115	2120	2125	
30	gcc act tgt ggc aag tac ctc ttc aac tgg gca gta agg acc aag ctc Ala Thr Cys Gly Lys Tyr Leu Phe Asn Trp Ala Val Arg Thr Lys Leu			8233
	2130	2135	2140	
35	aaa ctc act cca atc ccg gct gcg tcc cag ttg gat tta tcc agc tgg Lys Leu Thr Pro Ile Pro Ala Ala Ser Gln Leu Asp Leu Ser Ser Trp			8281
	2145	2150	2155	2160
40	ttc gtt gct ggt tac agc ggg gga gac ata tat cac agc ctg tct cgt Phe Val Ala Gly Tyr Ser Gly Gly Asp Ile Tyr His Ser Leu Ser Arg			8329
	2165	2170	2175	
45	gcc cga ccc cgc tgg ttc atg tgg tgc cta ctc cta ctt tct gta ggg Ala Arg Pro Arg Trp Phe Met Trp Cys Leu Leu Leu Ser Val Gly			8377
	2180	2185	2190	
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	2195	2200		
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20 Gln Val Trp Ile Pro Pro Leu Asn Val Arg Gly Gly Arg Asp Ala Val
50 55 60
Ile Leu Leu Thr Cys Ala Ile His Pro Glu Leu Ile Phe Thr Ile Thr
65 70 75 80
Lys Ile Leu Leu Ala Ile Leu Gly Pro Leu Met Val Leu Gln Ala Gly
25 85 90 95
Ile Thr Lys Val Pro Tyr Phe Val Arg Ala His Gly Leu Ile Arg Ala
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Cys Met Leu Val Arg Lys Val Ala Gly Gly His Tyr Val Gln Met Ala
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30 Leu Met Lys Leu Ala Ala Leu Thr Gly Thr Tyr Val Tyr Asp His Leu
130 135 140
Thr Pro Leu Arg Asp Trp Ala His Ala Gly Leu Arg Asp Leu Ala Val
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Ala Val Glu Pro Val Val Phe Ser Asp Met Glu Thr Lys Val Ile Thr
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Trp Gly Ala Asp Thr Ala Ala Cys Gly Asp Ile Ile Leu Gly Leu Pro
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Val Ser Ala Arg Arg Gly Arg Glu Ile His Leu Gly Pro Ala Asp Ser
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40 Leu Glu Gly Gln Gly Trp Arg Leu Leu Ala Pro Ile Thr Ala Tyr Ser
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Gln Gln Thr Arg Gly Leu Leu Gly Cys Ile Ile Thr Ser Leu Thr Gly
225 230 235 240
Arg Asp Arg Asn Gln Val Glu Gly Glu Val Gln Val Val Ser Thr Ala
45 245 250 255
Thr Gln Ser Phe Leu Ala Thr Cys Val Asn Gly Val Cys Trp Thr Val
260 265 270
Tyr His Gly Ala Gly Ser Lys Thr Leu Ala Gly Pro Lys Gly Pro Ile
275 280 285
50 Thr Gln Met Tyr Thr Asn Val Asp Gln Asp Leu Val Gly Trp Gln Ala
290 295 300
Pro Pro Gly Ala Arg Ser Leu Thr Pro Cys Thr Cys Gly Ser Ser Asp
305 310 315 320
Leu Tyr Leu Val Thr Arg His Ala Asp Val Ile Pro Val Arg Arg Arg
55 325 330 335
Gly Asp Ser Arg Gly Ser Leu Leu Ser Pro Arg Pro Val Ser Tyr Leu
340 345 350

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	Gly	Ile	Phe	Arg	Ala	Ala	Val	Cys	Thr	Arg	Gly	Val	Ala	Lys	Ala	Val
	370				375					380						
5	Asp	Phe	Val	Pro	Val	Glu	Ser	Met	Glu	Thr	Thr	Met	Arg	Ser	Pro	Val
	385				390				395				400			
	Phe	Thr	Asp	Asn	Ser	Ser	Pro	Pro	Ala	Val	Pro	Gln	Thr	Phe	Gln	Val
					405				410				415			
10	Ala	His	Leu	His	Ala	Pro	Thr	Gly	Ser	Gly	Lys	Ser	Thr	Lys	Val	Pro
					420				425				430			
	Ala	Ala	Tyr	Ala	Ala	Gln	Gly	Tyr	Lys	Val	Leu	Val	Leu	Asn	Pro	Ser
					435				440			445				
	Val	Ala	Ala	Thr	Leu	Gly	Phe	Gly	Ala	Tyr	Met	Ser	Lys	Ala	His	Gly
					450				455			460				
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					485				490				495			
20	Ser	Gly	Gly	Ala	Tyr	Asp	Ile	Ile	Ile	Cys	Asp	Glu	Cys	His	Ser	Thr
					500				505				510			
	Asp	Ser	Thr	Thr	Ile	Leu	Gly	Ile	Gly	Thr	Val	Leu	Asp	Gln	Ala	Glu
					515				520			525				
	Thr	Ala	Gly	Ala	Arg	Leu	Val	Val	Leu	Ala	Thr	Ala	Thr	Pro	Pro	Gly
					530				535			540				
25	Ser	Val	Thr	Val	Pro	His	Pro	Asn	Ile	Glu	Glu	Val	Ala	Leu	Ser	Ser
					545				550			555				560
	Thr	Gly	Glu	Ile	Pro	Phe	Tyr	Gly	Lys	Ala	Ile	Pro	Ile	Glu	Thr	Ile
					565				570				575			
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					580				585				590			
	Glu	Leu	Ala	Ala	Lys	Leu	Ser	Gly	Leu	Gly	Leu	Asn	Ala	Val	Ala	Tyr
					595				600			605				
	Tyr	Arg	Gly	Leu	Asp	Val	Ser	Val	Ile	Pro	Thr	Ser	Gly	Asp	Val	Ile
					610				615			620				
35	Val	Val	Ala	Thr	Asp	Ala	Leu	Met	Thr	Gly	Phe	Thr	Gly	Asp	Phe	Asp
					625				630			635				640
	Ser	Val	Ile	Asp	Cys	Asn	Thr	Cys	Val	Thr	Gln	Thr	Val	Asp	Phe	Ser
					645				650			655				
	Leu	Asp	Pro	Thr	Phe	Thr	Ile	Glu	Thr	Thr	Thr	Val	Pro	Gln	Asp	Ala
					660				665			670				
40	Val	Ser	Arg	Ser	Gln	Arg	Arg	Gly	Arg	Thr	Gly	Arg	Gly	Arg	Met	Gly
					675				680			685				
	Ile	Tyr	Arg	Phe	Val	Thr	Pro	Gly	Glu	Arg	Pro	Ser	Gly	Met	Phe	Asp
					690				695			700				
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					705				710			715				720
	Leu	Thr	Pro	Ala	Glu	Thr	Ser	Val	Arg	Leu	Arg	Ala	Tyr	Leu	Asn	Thr
					725				730			735				
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					740				745			750				
	Phe	Thr	Gly	Leu	Thr	His	Ile	Asp	Ala	His	Phe	Leu	Ser	Gln	Thr	Lys
					755				760			765				
	Gln	Ala	Gly	Asp	Asn	Phe	Pro	Tyr	Leu	Val	Ala	Tyr	Gln	Ala	Thr	Val
					770				775			780				
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	Cys	Leu	Ile	Arg	Leu	Lys	Pro	Thr	Leu	His	Gly	Pro	Thr	Pro	Leu	Leu

	805	810	815
	Tyr Arg Leu Gly Ala Val Gln Asn Glu Val Thr Thr His Pro Ile		
	820	825	830
5	Thr Lys Tyr Ile Met Ala Cys Met Ser Ala Asp Leu Glu Val Val Thr		
	835	840	845
	Ser Thr Trp Val Leu Val Gly Gly Val Leu Ala Ala Leu Ala Ala Tyr		
	850	855	860
	Cys Leu Thr Thr Gly Ser Val Val Ile Val Gly Arg Ile Ile Leu Ser		
	865	870	875
10	Gly Xaa Pro Ala Ile Ile Pro Asp Arg Glu Val Leu Tyr Arg Glu Phe		
	885	890	895
	Asp Glu Met Glu Glu Cys Ala Ser His Leu Pro Tyr Ile Glu Gln Gly		
	900	905	910
15	Met Gln Leu Ala Glu Gln Phe Lys Gln Lys Ala Ile Gly Leu Leu Gln		
	915	920	925
	Thr Ala Thr Lys Gln Ala Glu Ala Ala Ala Pro Val Val Glu Ser Lys		
	930	935	940
	Trp Arg Thr Leu Glu Ala Phe Trp Ala Lys His Met Trp Asn Phe Ile		
	945	950	955
20	Ser Gly Ile Gln Tyr Leu Ala Gly Leu Ser Thr Leu Pro Gly Asn Pro		
	965	970	975
	Ala Ile Ala Ser Leu Met Ala Phe Thr Ala Ser Ile Thr Ser Pro Leu		
	980	985	990
	Thr Thr Gln His Thr Leu Leu Phe Asn Ile Leu Gly Gly Trp Val Ala		
25	995	1000	1005
	Ala Gln Leu Ala Pro Pro Ser Ala Ala Ser Ala Phe Val Gly Ala Gly		
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	Ile Ala Gly Ala Ala Val Gly Ser Ile Gly Leu Gly Lys Val Leu Val		
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30	1040		1040
	Asp Ile Leu Ala Gly Tyr Gly Ala Gly Val Ala Gly Ala Leu Val Ala		
	1045	1050	1055
	Phe Lys Val Met Ser Gly Glu Met Pro Ser Thr Glu Asp Leu Val Asn		
	1060	1065	1070
	Leu Leu Pro Ala Ile Leu Ser Pro Gly Ala Leu Val Val Gly Val Val		
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	Cys Ala Ala Ile Leu Arg Arg His Val Gly Pro Gly Glu Gly Ala Val		
	1090	1095	1100
	Gln Trp Met Asn Arg Leu Ile Ala Phe Ala Ser Arg Gly Asn His Val		
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40	Ser Pro Thr His Tyr Val Pro Glu Ser Asp Ala Ala Ala Arg Val Thr		
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	Gln Ile Leu Ser Ser Leu Thr Ile Thr Gln Leu Leu Lys Arg Leu His		
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	Gln Trp Ile Asn Glu Asp Cys Ser Thr Pro Cys Ser Gly Ser Trp Leu		
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	Arg Asp Val Trp Asp Trp Ile Cys Thr Val Leu Thr Asp Phe Lys Thr		
	1170	1175	1180
	Trp Leu Gln Ser Lys Leu Leu Pro Arg Leu Pro Gly Val Pro Phe Phe		
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50	Ser Cys Gln Arg Gly Tyr Lys Gly Val Trp Arg Gly Asp Gly Ile Met		
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	Gln Thr Thr Cys Pro Cys Gly Ala Gln Ile Thr Gly His Val Lys Asn		
	1220	1225	1230
	Cys Ser Met Arg Ile Val Gly Pro Arg Thr Cys Ser Asn Thr Trp His		
55	1235	1240	1245
	Gly Thr Phe Pro Ile Asn Ala Tyr Thr Thr Gly Pro Cys Thr Pro Ser		
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 1285 1290 1295
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 10 1330 1335 1340
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 25 Arg Glu Val Ser Val Pro Ala Glu Ile Leu Arg Arg Ser Arg Lys Phe
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 Xaa Glu Ser Trp Lys Asp Pro Asp Tyr Val Pro Pro Val Val His Gly
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 Glu Pro Gly Asp Pro Asp Leu Ser Asp Gly Ser Trp Ser Thr Val Ser
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 Glu Glu Ala Ser Glu Asp Val Val Cys Cys Ser Met Ser Tyr Thr Trp
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 45 Thr Gly Ala Leu Ile Thr Pro Cys Ala Ala Glu Glu Thr Lys Leu Pro
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 1635 1640 1645
 Ala Thr Thr Ser Arg Ser Ala Ser Leu Arg Gln Lys Lys Val Thr Phe
 50 1650 1655 1660
 Asp Arg Leu Gln Val Leu Asp Asp His Tyr Arg Asp Val Leu Lys Glu
 1665 1670 1675 1680
 Met Lys Ala Lys Ala Ser Thr Val Lys Ala Lys Leu Leu Ser Val Glu
 1685 1690 1695
 55 Glu Ala Cys Lys Leu Thr Pro Pro His Ser Ala Arg Ser Lys Phe Gly
 1700 1705 1710
 Tyr Gly Ala Lys Asp Val Arg Asn Leu Ser Ser Lys Ala Val Asn His

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	Asp Thr Thr Ile Met Ala Lys Asn Glu Val Phe Cys Val Gln Pro Glu		
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	Lys Gly Gly Arg Lys Pro Ala Arg Leu Ile Val Phe Pro Asp Leu Gly		1760
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	Val Arg Val Cys Glu Lys Met Ala Leu Tyr Asp Val Val Ser Thr Leu		
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10	Pro Gln Ala Val Met Gly Ser Ser Tyr Gly Phe Gln Tyr Ser Pro Gly		
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	Gln Arg Val Glu Phe Leu Val Asn Ala Trp Lys Ala Lys Lys Cys Pro		
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	Met Gly Phe Ala Tyr Asp Thr Arg Cys Phe Asp Ser Thr Val Thr Glu		
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	Asn Asp Ile Arg Val Glu Glu Ser Ile Tyr Gln Cys Cys Asp Leu Ala		1840
	1845	1850	1855
	Pro Glu Ala Arg Gln Ala Ile Arg Ser Leu Thr Glu Arg Leu Tyr Ile		
	1860	1865	1870
20	Gly Gly Pro Leu Thr Asn Ser Lys Gly Gln Asn Cys Gly Tyr Arg Arg		
	1875	1880	1885
	Cys Arg Ala Ser Gly Val Leu Thr Thr Ser Cys Gly Asn Thr Leu Thr		
	1890	1895	1900
	Cys Tyr Leu Lys Ala Ala Ala Cys Arg Ala Ala Lys Leu Gln Asp		
25	1905	1910	1915
	Cys Thr Met Leu Val Cys Gly Asp Asp Leu Val Val Ile Cys Glu Ser		1920
	1925	1930	1935
	Ala Gly Thr Gln Glu Asp Glu Ala Ser Leu Arg Ala Phe Thr Glu Ala		
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30	Met Thr Arg Tyr Ser Ala Pro Pro Gly Asp Pro Pro Lys Pro Glu Tyr		
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	Asp Leu Glu Leu Ile Thr Ser Cys Ser Ser Asn Val Ser Val Ala His		
	1970	1975	1980
	Asp Ala Ser Gly Lys Arg Val Tyr Tyr Leu Thr Arg Asp Pro Thr Thr		
35	1985	1990	1995
	Pro Leu Ala Arg Ala Ala Trp Glu Thr Ala Arg His Thr Pro Val Asn		2000
	2005	2010	2015
	Ser Trp Leu Gly Asn Ile Ile Met Tyr Ala Pro Thr Leu Trp Ala Arg		
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40	Met Ile Leu Met Thr His Phe Phe Ser Ile Leu Leu Ala Gln Glu Gln		
	2035	2040	2045
	Leu Glu Lys Ala Leu Asp Cys Gln Ile Tyr Gly Ala Cys Tyr Ser Ile		
	2050	2055	2060
	Glu Pro Leu Asp Leu Pro Gln Ile Ile Gln Arg Leu His Gly Leu Ser		
45	2065	2070	2075
	Ala Phe Ser Leu His Ser Tyr Ser Pro Gly Glu Ile Asn Arg Val Ala		2080
	2085	2090	2095
	Ser Cys Leu Arg Lys Leu Gly Val Pro Pro Leu Arg Val Trp Arg His		
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50	Arg Ala Arg Ser Val Arg Ala Arg Leu Leu Ser Gln Gly Gly Arg Ala		
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	Ala Thr Cys Gly Lys Tyr Leu Phe Asn Trp Ala Val Arg Thr Lys Leu		
	2130	2135	2140
	Lys Leu Thr Pro Ile Pro Ala Ala Ser Gln Leu Asp Leu Ser Ser Trp		
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	Phe Val Ala Gly Tyr Ser Gly Gly Asp Ile Tyr His Ser Leu Ser Arg		2160
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ctg ata ctc ttg acc ttg tca ccg cac tat aag ctg ttc ctc gct agg 1897
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ctc ata tgg tgg tta caa tat ttt atc acc agg gcc gag gca cac ttg 1945
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	Cys Met Leu Val Arg Lys Val Ala Gly Gly His Tyr Val Gln Met Ala	
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	Leu Met Lys Leu Ala Ala Leu Thr Gly Thr Tyr Val Tyr Asp His Leu	
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	Thr Pro Leu Arg Asp Trp Ala His Ala Gly Leu Arg Asp Leu Ala Val	
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	Ala Val Glu Pro Val Val Phe Ser Asp Met Glu Thr Lys Val Ile Thr	
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	Trp Gly Ala Asp Thr Ala Ala Cys Gly Asp Ile Ile Leu Gly Leu Pro	
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	Val Ser Ala Arg Arg Gly Arg Glu Ile His Leu Gly Pro Ala Asp Ser	
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	Leu Glu Gly Gln Gly Trp Arg Leu Leu Ala Pro Ile Thr Ala Tyr Ser	
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	Gln Gln Thr Arg Gly Leu Leu Gly Cys Ile Ile Thr Ser Leu Thr Gly	
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	Arg Asp Arg Asn Gln Val Glu Gly Glu Val Gln Val Val Ser Thr Ala	
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	Thr Gln Ser Phe Leu Ala Thr Cys Val Asn Gly Val Cys Trp Thr Val	
	260 265 270	

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	Tyr His Gly Ala Gly Ser Lys Thr Leu Ala Gly Pro Lys Gly Pro Ile	
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	Thr Gln Met Tyr Thr Asn Val Asp Gln Asp Leu Val Gly Trp Gln Ala	
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	Leu Tyr Leu Val Thr Arg His Ala Asp Val Ile Pro Val Arg Arg Arg	
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	Gly Asp Ser Arg Gly Ser Leu Leu Ser Pro Arg Pro Val Ser Tyr Leu	
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	Lys Gly Ser Ser Gly Pro Leu Leu Cys Pro Ser Gly His Ala Val	
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	Gly Ile Phe Arg Ala Ala Val Cys Thr Arg Gly Val Ala Lys Ala Val	
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30	gac ttt gta ccc gtc gag tct atg gga acc act atg cgg tcc ccg gtc	3001
	Asp Phe Val Pro Val Glu Ser Met Gly Thr Thr Met Arg Ser Pro Val	
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	Phe Thr Asp Asn Ser Ser Pro Pro Ala Val Pro Gln Thr Phe Gln Val	
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	Ala His Leu His Ala Pro Thr Gly Ser Gly Lys Ser Thr Lys Val Pro	
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45	gtc gcc gcc acc cta ggt ttc ggg gcg tat atg tct aag gca cat ggt	3193
	Val Ala Ala Thr Leu Gly Phe Gly Ala Tyr Met Ser Lys Ala His Gly	
	450 455 460	
50	atc gac cct aac atc aga acc ggg gta agg acc atc acc acg ggt gcc	3241
	Ile Asp Pro Asn Ile Arg Thr Gly Val Arg Thr Ile Thr Thr Gly Ala	
	465 470 475 480	
55	ccc atc acg tac tcc acc tat ggc aag ttt ctt gcc gac ggt ggt tgc	3289
	Pro Ile Thr Tyr Ser Thr Tyr Gly Lys Phe Leu Ala Asp Gly Gly Cys	
	485 490 495	
	tct ggg ggc gcc tat gac atc ata ata tgt gat gag tgc cac tca act	3337

	Ser Gly Gly Ala Tyr Asp Ile Ile Ile Cys Asp Glu Cys His Ser Thr		
	500	505	510
5	gac tcg acc act atc ctg ggc atc ggc aca gtc ctg gac caa gcg gag		3385
	Asp Ser Thr Thr Ile Leu Gly Ile Gly Thr Val Leu Asp Gln Ala Glu		
	515	520	525
10	acg gct gga gca cga ctc gtc gtg ctc gcc acc gct acg cct ccg gga		3433
	Thr Ala Gly Ala Arg Leu Val Val Leu Ala Thr Ala Thr Pro Pro Gly		
	530	535	540
15	tcg gtc acc gtg cca cat cca aac atc gag gag gtg gct ctg tcc agc		3481
	Ser Val Thr Val Pro His Pro Asn Ile Glu Glu Val Ala Leu Ser Ser		
	545	550	555
	560		
	act gga gaa atc ccc ttt tat ggc aaa gcc atc ccc atc gag acc atc		3529
	Thr Gly Glu Ile Pro Phe Tyr Gly Lys Ala Ile Pro Ile Glu Thr Ile		
	565	570	575
20	aag ggg ggg agg cac ctc att ttc tgc cat tcc aag aag aaa tgt gat		3577
	Lys Gly Gly Arg His Leu Ile Phe Cys His Ser Lys Lys Cys Asp		
	580	585	590
25	gag ctc gcc gcg aag ctg tcc ggc ctc gga ctc aat gct gta gca tat		3625
	Glu Leu Ala Ala Lys Leu Ser Gly Leu Gly Leu Asn Ala Val Ala Tyr		
	595	600	605
30	tac cgg ggc ctt gat gta tcc gtc ata cca act acg gga gac gtc att		3673
	Tyr Arg Gly Leu Asp Val Ser Val Ile Pro Thr Ser Gly Asp Val Ile		
	610	615	620
35	gtc gta gca acg gac gct cta atg acg ggc ttt acc ggc gat ttc gac		3721
	Val Val Ala Thr Asp Ala Leu Met Thr Gly Phe Thr Gly Asp Phe Asp		
	625	630	635
	640		
	tca gtg atc gac tgc aat aca tgt gtc acc cag aca gtc gac ttc acg		3769
	Ser Val Ile Asp Cys Asn Thr Cys Val Thr Gln Thr Val Asp Phe Ser		
	645	650	655
40	ctg gac ccg acc ttc acc att gag acg acg acc gtg cca caa gac gcg		3817
	Leu Asp Pro Thr Phe Thr Ile Glu Thr Thr Val Pro Gln Asp Ala		
	660	665	670
45	gtg tca cgc tcg cag cgg cga ggc agg act ggt agg ggc agg atg ggc		3865
	Val Ser Arg Ser Gln Arg Arg Gly Arg Thr Gly Arg Gly Arg Met Gly		
	675	680	685
50	att tac agg ttt gtg act cca gga gaa cgg ccc tcg ggc atg ttc gat		3913
	Ile Tyr Arg Phe Val Thr Pro Gly Glu Arg Pro Ser Gly Met Phe Asp		
	690	695	700
55	tcc tcg gtt ctg tgc gag tgc tat gac gcg ggc tgc gct tgg tac gag		3961
	Ser Ser Val Leu Cys Glu Cys Tyr Asp Ala Gly Cys Ala Trp Tyr Glu		
	705	710	715
	720		
	ctc acg ccc gcc gag acc tca gtt agg ttg cgg gct tac cta aac aca		4009
	Leu Thr Pro Ala Glu Thr Ser Val Arg Leu Arg Ala Tyr Leu Asn Thr		

	725	730	735	
				4057
5	cca ggg ttg ccc gtc tgc cag gac cat ctg gag ttc tgg gag agc gtc Pro Gly Leu Pro Val Cys Gln Asp His Leu Glu Phe Trp Glu Ser Val 740	745	750	
				4105
10	ttt aca ggc ctc acc cac ata gac gcc cat ttc ttg tcc cag act aag Phe Thr Gly Leu Thr His Ile Asp Ala His Phe Leu Ser Gln Thr Lys 755	760	765	
				4153
15	cag gca gga gac aac ttc ccc tac ctg gta gca tac cag gct acg gtg Gln Ala Gly Asp Asn Phe Pro Tyr Leu Val Ala Tyr Gln Ala Thr Val 770	775	780	
				4201
20	tgc gcc agg gct cag gct cca cct cca tcg tgg gac caa atg tgg aag Cys Ala Arg Ala Gln Ala Pro Pro Ser Trp Asp Gln Met Trp Lys 785	790	795	800
				4249
25	tgt ctc ata cgg cta aag cct acg ctg cac ggg cca acg ccc ctg ctg Cys Leu Ile Arg Leu Lys Pro Thr Leu His Gly Pro Thr Pro Leu Leu 805	810	815	
				4297
30	tat agg ctg gga gcc gtt caa aac gag gtt act acc aca cac ccc ata Tyr Arg Leu Gly Ala Val Gln Asn Glu Val Thr Thr His Pro Ile 820	825	830	
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35	acc aaa tac atc atg gca tgc atg tcg gct gac ctg gag gtc acg Thr Lys Tyr Ile Met Ala Cys Met Ser Ala Asp Leu Glu Val Val Thr 835	840	845	
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40	agc acc tgg gtg ctg gta ggc gga gtc cta gca gct ctg gcc gcg tat Ser Thr Trp Val Leu Val Gly Gly Val Leu Ala Ala Leu Ala Ala Tyr 850	855	860	
				4441
45	tgc ctg aca aca ggc agc gtg gtc att gtg ggc agg atc atc ttg tcc Cys Leu Thr Thr Gly Ser Val Val Ile Val Gly Arg Ile Ile Leu Ser 865	870	875	880
				4489
50	gga aag ccg gcc atc att ccc gac agg gaa gtc ctt tac cgg gag ttc Gly Lys Pro Ala Ile Ile Pro Asp Arg Glu Val Leu Tyr Arg Glu Phe 885	890	895	
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55	gat gag atg gaa gag tgc gcc tca cac ctc cct tac atc gaa cag gga Asp Glu Met Glu Glu Cys Ala Ser His Leu Pro Tyr Ile Glu Gln Gly 900	905	910	
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60	atg cag ctc gcc gaa caa ttc aaa cag aag gca atc ggg ttg ctg caa Met Gln Leu Ala Glu Gln Phe Lys Gln Lys Ala Ile Gly Leu Leu Gln 915	920	925	
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	Ser Gly Ile Gln Tyr Leu Ala Gly Leu Ser Thr Leu Pro Gly Asn Pro	
	965 970 975	
5	gcg ata gca tca ctg atg gca ttc aca gcc tct atc acc agc ccg ctc	4777
	Ala Ile Ala Ser Leu Met Ala Phe Thr Ala Ser Ile Thr Ser Pro Leu	
	980 985 990	
10	acc acc caa cat acc ctc ctg ttt aac atc ctg ggg gga tgg gtg gcc	4825
	Thr Thr Gln His Thr Leu Leu Phe Asn Ile Leu Gly Gly Trp Val Ala	
	995 1000 1005	
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	Ala Gln Leu Ala Pro Pro Ser Ala Ala Ser Ala Phe Val Gly Ala Gly	
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	Ile Ala Gly Ala Ala Val Gly Ser Ile Gly Leu Gly Lys Val Leu Val	
	1025 1030 1035 1040	
	gat att ttg gca ggt tat gga gca ggg gtg gca ggc gcg ctc gtg gcc	4969
	Asp Ile Leu Ala Gly Tyr Ala Gly Val Ala Gly Ala Leu Val Ala	
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25	ttt aag gtc atg agc ggc gag atg ccc tcc acc gag gac ctg gtt aac	5017
	Phe Lys Val Met Ser Gly Glu Met Pro Ser Thr Glu Asp Leu Val Asn	
	1060 1065 1070	
30	cta ctc cct gct atc ctc tcc cct ggc gcc cta gtc gtc ggg gtc gtg	5065
	Leu Leu Pro Ala Ile Leu Ser Pro Gly Ala Leu Val Val Gly Val Val	
	1075 1080 1085	
35	tgc gca gcg ata ctg cgt cggt cac gtg ggc cca ggg gag ggg gct gtg	5113
	Cys Ala Ala Ile Leu Arg Arg His Val Gly Pro Gly Glu Gly Ala Val	
	1090 1095 1100	
40	cag tgg atg aac cgg ctg ata gcg ttc gct tcg cgg ggt aac cac gtc	5161
	Gln Trp Met Asn Arg Leu Ile Ala Phe Ala Ser Arg Gly Asn His Val	
	1105 1110 1115 1120	
	tcc ccc acg cac tat gtg cct gag agc gac gct gca gca cgt gtc act	5209
	Ser Pro Thr His Tyr Val Pro Glu Ser Asp Ala Ala Ala Arg Val Thr	
	1125 1130 1135	
45	cag atc ctc tct agt ctt acc atc act cag ctg ctg aag agg ctt cac	5257
	Gln Ile Leu Ser Ser Leu Thr Ile Thr Gln Leu Leu Lys Arg Leu His	
	1140 1145 1150	
50	cag tgg atc aac gag gac tgc tcc acg cca tgc tcc ggc tcg tgg cta	5305
	Gln Trp Ile Asn Glu Asp Cys Ser Thr Pro Cys Ser Gly Ser Trp Leu	
	1155 1160 1165	
55	aga gat gtt tgg gat tgg gta tgc acg gtg ttg act gat ttc aag acc	5353
	Arg Asp Val Trp Asp Trp Val Cys Thr Val Leu Thr Asp Phe Lys Thr	
	1170 1175 1180	

	tgg ctc cag tcc aag ctc ctg ccg cga ttg ccg gga gtc ccc ttc ttc	5401
1185	Trp Leu Gln Ser Lys Leu Leu Pro Arg Leu Pro Gly Val Pro Phe Phe	
	1190	1195
5	tca tgt caa cgt ggg tac aag gga gtc tgg ccg ggc gac ggc atc atg	5449
	Ser Cys Gln Arg Gly Tyr Lys Gly Val Trp Arg Gly Asp Gly Ile Met	
	1205	1210
	1215	
10	caa acc acc tgc cca tgt gga gca cag atc acc gga cat gtg aaa aac	5497
	Gln Thr Thr Cys Pro Cys Gly Ala Gln Ile Thr Gly His Val Lys Asn	
	1220	1225
	1230	
15	tgt tcc atg agg atc gtg ggg cct agg acc tgt agt aac acg tgg cat	5545
	Cys Ser Met Arg Ile Val Gly Pro Arg Thr Cys Ser Asn Thr Trp His	
	1235	1240
	1245	
	gga aca ttc ccc att aac gcg tac acc acg ggc ccc tgc acg .ccc tcc	5593
	Gly Thr Phe Pro Ile Asn Ala Tyr Thr Thr Gly Pro Cys Thr Pro Ser	
	1250	1255
	1260	
20	ccg gcg cca aat tat tct agg gcg ctg tgg ccg gtg gct gct gag gag	5641
	Pro Ala Pro Asn Tyr Ser Arg Ala Leu Trp Arg Val Ala Ala Glu Glu	
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	1275	1280
25	tac gtg gag gtt acg cgg gtg ggg gat ttc cac tac gtg acg ggc atg	5689
	Tyr Val Glu Val Thr Arg Val Gly Asp Phe His Tyr Val Thr Gly Met	
	1285	1290
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	Thr Thr Asp Asn Val Lys Cys Pro Cys Gln Val Pro Ala Pro Glu Phe	
	1300	1305
	1310	
35	ttc aca gaa gtg gat ggg gtg cgg ttg cac agg tac gct cca gcg tgc	5785
	Phe Thr Glu Val Asp Gly Val Arg Leu His Arg Tyr Ala Pro Ala Cys	
	1315	1320
	1325	
	aaa ccc ctc cta cgg gag gag gtc aca ttc ctg gtc ggg ctc aat caa	5833
	Lys Pro Leu Leu Arg Glu Glu Val Thr Phe Leu Val Gly Leu Asn Gln	
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	1340	
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	Tyr Leu Val Gly Ser Gln Leu Pro Cys Glu Pro Glu Pro Asp Val Ala	
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	1355	1360
45	gtg ctc act tcc atg ctc acc gac ccc tcc cac att acg gcg gag acg	5929
	Val Leu Thr Ser Met Leu Thr Asp Pro Ser His Ile Thr Ala Glu Thr	
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	1375	
50	gct aag cgt agg ctg gcc agg gga tct ccc ccc tcc ttg gcc agc tca	5977
	Ala Lys Arg Arg Leu Ala Arg Gly Ser Pro Pro Ser Leu Ala Ser Ser	
	1380	1385
	1390	
55	tca gct agc cag ctg tct gcg ccc tcc ttg aag gca aca tgc act acc	6025
	Ser Ala Ser Gln Leu Ser Ala Pro Ser Leu Lys Ala Thr Cys Thr Thr	
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	Arg His Asp Ser Pro Asp Ala Asp Leu Ile Glu Ala Asn Leu Leu Trp		
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	1440		
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	Arg Glu Val Ser Val Pro Ala Glu Ile Leu Arg Arg Ser Arg Lys Phe		
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15	cct cga gcg atg ccc ata tgg gca cgc ccg gat tac aac cct cca ctg		6265
	Pro Arg Ala Met Pro Ile Trp Ala Arg Pro Asp Tyr Asn Pro Pro Leu		
	1475	1480	1485
20	tta gag tcc tgg aag gac ccg gac tac gtc cct cca gtg gta cac ggg		6313
	Leu Glu Ser Trp Lys Asp Pro Asp Tyr Val Pro Pro Val Val His Gly		
	1490	1495	1500
25	tgt cca ttg ccg cct gcc aag gcc cct ccg ata cca cct cca ccg agg		6361
	Cys Pro Leu Pro Pro Ala Lys Ala Pro Pro Ile Pro Pro Pro Arg Arg		
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	1520		
	aag agg acg gtt gtc ctg tca gaa tct acc gtg tct tct gcc ttg gcg		6409
	Lys Arg Thr Val Val Leu Ser Glu Ser Thr Val Ser Ser Ala Leu Ala		
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	gag ctc gcc aca aag acc ttc ggc agc tcc gaa tcg tcg gcc gtc gac		6457
	Glu Leu Ala Thr Lys Thr Phe Gly Ser Ser Glu Ser Ser Ala Val Asp		
	1540	1545	1550
35	agc ggc acg gca acg gcc tct cct gac cag ccc tcc gac gac ggc gac		6505
	Ser Gly Thr Ala Thr Ala Ser Pro Asp Gln Pro Ser Asp Asp Gly Asp		
	1555	1560	1565
40	gcg gga tcc gac gtt gag tcg tac tcc tcc atg ccc ccc ctt gag ggg		6553
	Ala Gly Ser Asp Val Glu Ser Tyr Ser Ser Met Pro Pro Leu Glu Gly		
	1570	1575	1580
45	gag ccg ggg gat ccc gat ctc agc gac ggg tct tgg tct acc gta agc		6601
	Glu Pro Gly Asp Pro Asp Leu Ser Asp Gly Ser Trp Ser Thr Val Ser		
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	gag gag gct agt gag gac gtc gtc tgc tcg atg tcc tac aca tgg		6649
	Glu Glu Ala Ser Glu Asp Val Val Cys Cys Ser Met Ser Tyr Thr Trp		
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	aca ggc gcc ctg atc acg cca tgc gct gcg gag gaa acc aag ctg ccc		6697
	Thr Gly Ala Leu Ile Thr Pro Cys Ala Ala Glu Glu Thr Lys Leu Pro		
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55	atc aat gca ctg agc aac tct ttg ctc cgt cac cac aac ttg gtc tat		6745
	Ile Asn Ala Leu Ser Asn Ser Leu Leu Arg His His Asn Leu Val Tyr		

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	gct aca aca tct cgc agc gca agc ctg cg ^g cag aag aag gtc acc ttt			6793
	Ala Thr Thr Ser Arg Ser Ala Ser Leu Arg Gln Lys Lys Val Thr Phe			
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	gac aga ctg cag gtc ctg gac cac tac cg ^g gac gtg ctc aag gag			6841
	Asp Arg Leu Gln Val Leu Asp Asp His Tyr Arg Asp Val Leu Lys Glu			
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	Met Lys Ala Lys Ala Ser Thr Val Lys Ala Lys Leu Leu Ser Val Glu			
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	Glu Ala Cys Lys Leu Thr Pro Pro His Ser Ala Arg Ser Lys Phe Gly			
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	Tyr Gly Ala Lys Asp Val Arg Asn Leu Ser Ser Lys Ala Val Asn His			
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	Ile Arg Ser Val Trp Lys Asp Leu Leu Glu Asp Thr Glu Thr Pro Ile			
	1730	1735	1740	
	gac acc acc atc atg gca aaa aat gag gtt ttc tgc gtc caa cca gag			7081
	Asp Thr Thr Ile Met Ala Lys Asn Glu Val Phe Cys Val Gln Pro Glu			
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30	aag ggg ggc cgc aag cca gct cgc ctt atc gta ttc cca gat ttg ggg			7129
	Lys Gly Gly Arg Lys Pro Ala Arg Leu Ile Val Phe Pro Asp Leu Gly			
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	Val Arg Val Cys Glu Lys Met Ala Leu Tyr Asp Val Val Ser Thr Leu			
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	Pro Gln Ala Val Met Gly Ser Ser Tyr Gly Phe Gln Tyr Ser Pro Gly			
	1795	1800	1805	
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	Gln Arg Val Glu Phe Leu Val Asn Ala Trp Lys Ala Lys Lys Cys Pro			
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	atg ggc ttc gca tat gac acc cgc tgt ttt gac tca acg gtc act gag			7321
	Met Gly Phe Ala Tyr Asp Thr Arg Cys Phe Asp Ser Thr Val Thr Glu			
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	Asn Asp Ile Arg Val Glu Glu Ser Ile Tyr Gln Cys Cys Asp Leu Ala			
	1845	1850	1855	
55	ccc gaa gcc aga cag gcc ata agg tcg ctc aca gag cg ^g ctt tac atc			7417
	Pro Glu Ala Arg Gln Ala Ile Arg Ser Leu Thr Glu Arg Leu Tyr Ile			
	1860	1865	1870	

	ggg ggc ccc ctg act aat tct aaa ggg cag aac tgc ggc tat cgc cg	7465
	Gly Gly Pro Leu Thr Asn Ser Lys Gly Gln Asn Cys Gly Tyr Arg Arg	
	1875 1880 1885	
5	tgc cgc gcg agc ggt gta ctg acg acc agc tgc ggt aat acc ctc aca	7513
	Cys Arg Ala Ser Gly Val Leu Thr Thr Ser Cys Gly Asn Thr Leu Thr	
	1890 1895 1900	
10	tgt tac ttg aag gcc gct gcg gcc tgt cga gct gcg aag ctc cag gac	7561
	Cys Tyr Leu Lys Ala Ala Ala Cys Arg Ala Ala Lys Leu Gln Asp	
	1905 1910 1915 1920	
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	Cys Thr Met Leu Val Cys Gly Asp Asp Leu Val Val Ile Cys Glu Ser	
	1925 1930 1935	
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	Ala Gly Thr Gln Glu Asp Glu Ala Ser Leu Arg Ala Phe Thr Glu Ala	
	1940 1945 1950	
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	Met Thr Arg Tyr Ser Ala Pro Pro Gly Asp Pro Pro Lys Pro Glu Tyr	
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	Ala Phe Ser Leu His Ser Tyr Ser Pro Gly Glu Ile Asn Arg Val Ala	
	2085 2090 2095	

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	Ser Cys Leu Arg Lys Leu Gly Val Pro Pro Leu Arg Val Trp Arg His	
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	Arg Ala Arg Ser Val Arg Ala Arg Leu Leu Ser Gln Gly Gly Arg Ala	
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	2125	
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	Ala Thr Cys Gly Lys Tyr Leu Phe Asn Trp Ala Val Arg Thr Lys Leu	
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15	aaa ctc act cca atc ccg gct gcg tcc cag ttg gat tta tcc agc tgg	8281
	Lys Leu Thr Pro Ile Pro Ala Ala Ser Gln Leu Asp Leu Ser Ser Trp	
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	ttc gtt gct ggt tac agc ggg gga gac ata tat cac agc ctg tct cgt	8329
	Phe Val Ala Gly Tyr Ser Gly Gly Asp Ile Tyr His Ser Leu Ser Arg	
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	Ala Arg Pro Arg Trp Phe Thr Trp Cys Leu Leu Leu Ser Val Gly	
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	gcgagactgc tagccgagta gtgtgggtc gcgaaaggcc ttgtggtact gcctgatagg 300	
	gtgcttgcga gtgccccggg aggtctcgta gaccgtgcac catgagcacg aatcctaaac 360	
50	ctcaaagaaa aaccaaaggc cgccatgaa ttgaacaaga tggattgcac gcaggttctc 420	
	cggccgctt ggtggagagg ctattcggt atgactggc acaacagaca atcggctgtct 480	
	ctgatgccgc cgtgttccgg ctgtcagcgc agggccccc gttttttt gtcaagaccg 540	
	acctgtccgg tgccctgaat gaactgcagg acgaggcagc gcggctatcg tggctggcca 600	
	cgacggcgt tccttgcga gctgtgtctg acgttgtcac tgaagcggga agggactggc 660	
55	tgctattggg cgaagtgcgg gggcaggatc tcctgtcatc tcaccttgct cctgccgaga 720	
	aagtatccat catggctgat gcaatgcggc ggctgcatac gcttgcattcg gctacctgcc 780	
	cattcgacca ccaagcgaaa catcgatcg agcgagcacg tactcgatg gaagccggc 840	

	ttgtcgatca ggatgatctg gacgaagagc atcaggggct cgccgcagcc gaactgttcg 900	
	ccaggctcaa ggcgcgcatg cccgacggcg aggatctcg ctgtaccat ggcgatgcct 960	
5	gottgccgaa tatcatggt gaaaatggcc gctttctgg attcatcgac tggccggc 1020	
	tgggtgtggc ggaccgctat caggacatacg cgtnnctac ccgtatatt gctgaagagc 1080	
	ttggcggcga atggctgac cgcttcctcg tgcttacgg tattcgccct cccgattcgc 1140	
	agcgcatcgc cttctatcgc cttcttgac agttttctg agttcgcgc cagatgttaa 1200	
10	cagaccacaa cggttccct ctagcggat caattccgc ccccccccta acgttactgg 1260	
	ccgaagccgc ttgaaataag gccgggtgc gtttgtctat atgttatttt ccaccatatt 1320	
	gccgtcttt ggcaatgtga gggcccgaa acctggccct gtcttctga cgagcattcc 1380	
15	taggggtctt tcccctctcg ccaaaggaaat gcaaggctcg ttgaatgtcg tgaaggaagc 1440	
	agttcctctg gaagcttctt gaagacaaac aacgtctgta gcgaccctt gcaggcagcg 1500	
	gaacccccc cctggcaca ggtgcctctg cggccaaaag ccacgtgtat aagatacacc 1560	
	tgcaaaggcg gcacaacccc agtgcacgt tggatgtgg atagttgtgg aaagagtcaa 1620	
	atggctctcc tcaagcgtat tcaacaagg gctgaaggat gcccagaagg tacccattt 1680	
	tatggatct gatctggggc ctcggtgac atgtttaca tggatgttgg cgaggttaaa 1740	
	aaacgtctag gccccccgaa ccacgggac gtgtttcc tttgaaaaac acgataatac 1800	
	c atg gac cgg gag atg gca gca tcg tgc gga ggc gcg gtt ttc gta ggt 1849	
	Met Asp Arg Glu Met Ala Ala Ser Cys Gly Gly Ala Val Phe Val Gly 1849	
	1 5 10 15	
20	ctg ata ctc ttg acc ttg tca ccg cac tat aag ctg ttc ctc gct agg 1897	
	Leu Ile Leu Leu Thr Leu Ser Pro His Tyr Lys Leu Phe Leu Ala Arg 20 25 30	
25	ctc ata tgg tgg tta caa tat ttt atc acc agg gcc gag gca cac ttg 1945	
	Leu Ile Trp Trp Leu Gln Tyr Phe Ile Thr Arg Ala Glu Ala His Leu 35 40 45	
30	caa gtg tgg atc ccc ccc ctc aac gtt cgg ggg ggc cgc gat gcc gtc 1993	
	Gln Val Trp Ile Pro Pro Leu Asn Val Arg Gly Gly Arg Asp Ala Val 50 55 60	
35	atc ctc ctc acg tgc gcg atc cac cca gag cta atc ttt acc atc acc 2041	
	Ile Leu Leu Thr Cys Ala Ile His Pro Glu Leu Ile Phe Thr Ile Thr 65 70 75 80	
40	aaa atc ttg ctc gcc ata ctc ggt cca ctc atg gtg ctc cag gct ggt 2089	
	Lys Ile Leu Leu Ala Ile Leu Gly Pro Leu Met Val Leu Gln Ala Gly 85 90 95	
45	ata acc aaa gtg ccg tac ttc gtg cgc gca cac ggg ctc att cgt gca 2137	
	Ile Thr Lys Val Pro Tyr Phe Val Arg Ala His Gly Leu Ile Arg Ala 100 105 110	
50	tgc atg ctg gtg cgg aag gtt gct ggg ggt cat tat gtc caa atg gct 2185	
	Cys Met Leu Val Arg Lys Val Ala Gly Gly His Tyr Val Gln Met Ala 115 120 125	
55	ctc atg aag ttg gcc gca ctg aca ggt acg tac gtt tat gac cat ctc 2233	
	Leu Met Lys Leu Ala Ala Leu Thr Gly Thr Tyr Val Tyr Asp His Leu 130 135 140	
	acc cca ctg cgg gac tgg gcc cac gcg ggc cta cga gac ctt gcg gtc 2281	
	Thr Pro Leu Arg Asp Trp Ala His Ala Gly Leu Arg Asp Leu Ala Val 145 150 155 160	
	gca gtt gag ccc gtc gtc ttc tct gat atg gag acc aag gtt atc acc 2329	

	Ala Val Glu Pro Val Val Phe Ser Asp Met Glu Thr Lys Val Ile Thr		
	165	170	175
5	tgg ggg gca gac acc gcg gcg tgt ggg gac atc atc ttg ggc ctg ccc Trp Gly Ala Asp Thr Ala Ala Cys Gly Asp Ile Ile Leu Gly Leu Pro		2377
	180	185	190
10	gtc tcc gcc cgc agg ggg agg gag ata cat ctg gga ccg gca gac agc Val Ser Ala Arg Arg Gly Arg Glu Ile His Leu Gly Pro Ala Asp Ser		2425
	195	200	205
15	ctt gaa ggg cag ggg tgg cga ctc ctc gcg cct att acg gcc tac tcc Leu Glu Gly Gln Gly Trp Arg Leu Leu Ala Pro Ile Thr Ala Tyr Ser		2473
	210	215	220
20	caa cag acg cga ggc cta ctt ggc tgc atc atc act agc ctc aca ggc Gln Gln Thr Arg Gly Leu Leu Gly Cys Ile Ile Thr Ser Leu Thr Gly		2521
	225	230	235
	240		
25	cgg gac agg aac cag gtc gag ggg gag gtc caa gtg gtc tcc acc gca Arg Asp Arg Asn Gln Val Glu Gly Glu Val Gln Val Val Ser Thr Ala		2569
	245	250	255
30	aca caa tct ttc ctg gcg acc tgc gtc aat ggc gtg tgt tgg act gtc Thr Gln Ser Phe Leu Ala Thr Cys Val Asn Gly Val Cys Trp Thr Val		2617
	260	265	270
35	tat cat ggt gcc ggc tca aag acc ctt gcc ggc cca aag ggc cca atc Tyr His Gly Ala Gly Ser Lys Thr Leu Ala Gly Pro Lys Gly Pro Ile		2665
	275	280	285
40	acc caa atg tac acc aat gtg gac cag gac ctc gtc ggc tgg caa gcg Thr Gln Met Tyr Thr Asn Val Asp Gln Asp Leu Val Gly Trp Gln Ala		2713
	290	295	300
45	ccc ccc ggg gcg cgt tcc ttg aca cca tgc acc tgc ggc agc tcg gac Pro Pro Gly Ala Arg Ser Leu Thr Pro Cys Thr Cys Gly Ser Ser Asp		2761
	305	310	315
	320		
50	ctt tac ttg gtc acg agg cat gcc gat gtc att ccg gtg cgc cggt Leu Tyr Leu Val Thr Arg His Ala Asp Val Ile Pro Val Arg Arg Arg		2809
	325	330	335
55	ggc gac ggc agg ggg agc cta ctc tcc ccc agg ccc gtc tcc tac ttg Gly Asp Gly Arg Gly Ser Leu Leu Ser Pro Arg Pro Val Ser Tyr Leu		2857
	340	345	350
60	aag ggc tct tcg ggc ggt cca ctg ctc tgc ccc tcg ggg cac gct gtg Lys Gly Ser Ser Gly Gly Pro Leu Leu Cys Pro Ser Gly His Ala Val		2905
	355	360	365
65	ggc atc ttt cgg gct gcc gtg tgc acc cga ggg gtt gcg aag gcg gtg Gly Ile Phe Arg Ala Ala Val Cys Thr Arg Gly Val Ala Lys Ala Val		2953
	370	375	380
70	gac ttt gta ccc gtc gag tct atg gga acc act atg cgg tcc ccg gtc Asp Phe Val Pro Val Glu Ser Met Gly Thr Thr Met Arg Ser Pro Val		3001

	385	390	395	400	
	ttc acg gac aac tcg tcc cct ccg gcc gta ccg cag aca ttc cag gtg Phe Thr Asp Asn Ser Ser Pro Pro Ala Val Pro Gln Thr Phe Gln Val				3049
5	405	410	415		
	gcc cat cta cac gcc cct act ggt agc ggc aag agc act aag gtg ccg Ala His Leu His Ala Pro Thr Gly Ser Gly Lys Ser Thr Lys Val Pro				3097
	420	425	430		
10	gct gcg tat gca gcc caa ggg tat aag gtg ctt gtc ctg aac ccg tcc Ala Ala Tyr Ala Ala Gln Gly Tyr Lys Val Leu Val Leu Asn Pro Ser				3145
	435	440	445		
15	gtc gcc gcc acc cta ggt ttc ggg gcg tat atg tct aag gca cat ggt Val Ala Ala Thr Leu Gly Phe Gly Ala Tyr Met Ser Lys Ala His Gly				3193
	450	455	460		
20	atc gac cct aac atc aga acc ggg gta agg acc atc acc acg ggt gcc Ile Asp Pro Asn Ile Arg Thr Gly Val Arg Thr Ile Thr Thr Gly Ala				3241
	465	470	475	480	
	ccc atc acg tac tcc acc tat ggc aag ttt ctt gcc gac ggt ggt tgc Pro Ile Thr Tyr Ser Thr Tyr Gly Lys Phe Leu Ala Asp Gly Gly Cys				3289
25	485	490	495		
	tct ggg ggc gcc tat gac atc ata ata tgt gat gag tgc cac tca act Ser Gly Gly Ala Tyr Asp Ile Ile Cys Asp Glu Cys His Ser Thr				3337
	500	505	510		
30	gac tcg acc act atc ctg ggc atc ggc aca gtc ctg gac caa gcg gag Asp Ser Thr Thr Ile Leu Gly Ile Gly Thr Val Leu Asp Gln Ala Glu				3385
	515	520	525		
35	acg gct gga gcg cga ctc gtc gtg ctc gcc acc gct acg cct ccg gga Thr Ala Gly Ala Arg Leu Val Val Leu Ala Thr Ala Thr Pro Pro Gly				3433
	530	535	540		
40	tcg gtc acc gtg cca cat cca aac atc gag gag gtg gct ctg tcc agc Ser Val Thr Val Pro His Pro Asn Ile Glu Glu Val Ala Leu Ser Ser				3481
	545	550	555	560	
	act gga gaa atc ccc ttt tat ggc aaa gcc atc ccc atc gag acc atc Thr Gly Glu Ile Pro Phe Tyr Gly Lys Ala Ile Pro Ile Glu Thr Ile				3529
45	565	570	575		
	aag ggg ggg agg cac ctc att ttc tgc cat tcc aag aag aaa tgt gat Lys Gly Gly Arg His Leu Ile Phe Cys His Ser Lys Lys Cys Asp				3577
	580	585	590		
50	gag ctc gcc gcg aag ctg tcc ggc ctc gga ctc aat gct gta gca tat Glu Leu Ala Ala Lys Leu Ser Gly Leu Gly Leu Asn Ala Val Ala Tyr				3625
	595	600	605		
55	tac cgg ggc ctt gat gta tcc gtc ata cca act agc gga gac gtc att Tyr Arg Gly Leu Asp Val Ser Val Ile Pro Thr Ser Gly Asp Val Ile				3673
	610	615	620		

	gtc gta gca acg gac gct cta atg acg ggc ttt acc ggc gat ttc gac	3721
	Val Val Ala Thr Asp Ala Leu Met Thr Gly Phe Thr Gly Asp Phe Asp	
625	630	635
5	640	
	tca gtg atc gac tgc aat aca tgt gtc acc cag aca gtc gac ttc agc	3769
	Ser Val Ile Asp Cys Asn Thr Cys Val Thr Gln Thr Val Asp Phe Ser	
	645	650
	655	
10	ctg gac ccg acc ttc acc att gag acg acg acc gtg cca caa gac gcg	3817
	Leu Asp Pro Thr Phe Thr Ile Glu Thr Thr Val Pro Gln Asp Ala	
	660	665
	670	
15	gtg tca cgc tcg cag cgg cga ggc agg act ggt agg ggc agg atg ggc	3865
	Val Ser Arg Ser Gln Arg Arg Gly Arg Thr Gly Arg Gly Arg Met Gly	
	675	680
	685	
20	att tac agg ttt gtg act cca gga gaa cgg ccc tcg ggc atg ttc gat	3913
	Ile Tyr Arg Phe Val Thr Pro Gly Glu Arg Pro Ser Gly Met Phe Asp	
	690	695
	700	
25	tcc tcg gtt ctg tgc gag tgc tat gac gcg ggc tgt gct tgg tac gag	3961
	Ser Ser Val Leu Cys Glu Cys Tyr Asp Ala Gly Cys Ala Trp Tyr Glu	
	705	710
	715	720
30	ctc acg ccc gcc gag acc tca gtt agg ttg cgg gct tac cta aac aca	4009
	Leu Thr Pro Ala Glu Thr Ser Val Arg Leu Arg Ala Tyr Leu Asn Thr	
	725	730
	735	
35	cca ggg ttg ccc gtc tgc cag gac cat ctg gag ttc tgg gag agc gtc	4057
	Pro Gly Leu Pro Val Cys Gln Asp His Leu Glu Phe Trp Glu Ser Val	
	740	745
	750	
40	ttt aca ggc ctc acc cac ata gac gcc cat ttc ttg tcc cag act aag	4105
	Phe Thr Gly Leu Thr His Ile Asp Ala His Phe Leu Ser Gln Thr Lys	
	755	760
	765	
45	cag gca gga gac aac ttc ccc tac ctg gta gca tac cag gct acg gtg	4153
	Gln Ala Gly Asp Asn Phe Pro Tyr Leu Val Ala Tyr Gln Ala Thr Val	
	770	775
	780	
50	tgc gcc agg gct cag gct cca cct cca tcg tgg gac caa atg tgg aag	4201
	Cys Ala Arg Ala Gln Ala Pro Pro Pro Ser Trp Asp Gln Met Trp Lys	
	785	790
	795	800
55	tgt ctc ata cgg cta aag cct acg ctg cac ggg cca acg ccc ctg ctg	4249
	Cys Leu Ile Arg Leu Lys Pro Thr Leu His Gly Pro Thr Pro Leu Leu	
	805	810
	815	
50	tat agg ctg gga gcc gtt caa aac gag gtt act acc aca cac ccc ata	4297
	Tyr Arg Leu Gly Ala Val Gln Asn Glu Val Thr Thr His Pro Ile	
	820	825
	830	
55	acc aaa tac atc atg gca tgc atg tcg gct gac ctg gag gtc gtc acg	4345
	Thr Lys Tyr Ile Met Ala Cys Met Ser Ala Asp Leu Glu Val Val Thr	
	835	840
	845	

	agc acc tgg gtg ctg gta ggc gtc cta gca gct ctg gcc gcg tat	4393
	Ser Thr Trp Val Leu Val Gly Gly Val Leu Ala Ala Leu Ala Ala Tyr	
	850 855 860	
5	tgc ctg aca aca ggc agc gtg gtc att gtg ggc agg atc atc ttg tcc	4441
	Cys Leu Thr Thr Gly Ser Val Val Ile Val Gly Arg Ile Ile Leu Ser	
	865 870 875 880	
10	gga aag ccg gcc atc att ccc gac agg gaa gtc ttt tac cgg gag ttc	4489
	Gly Lys Pro Ala Ile Ile Pro Asp Arg Glu Val Phe Tyr Arg Glu Phe	
	885 890 895	
15	gat gag atg gaa gag tgc gcc tca cac ctc cct tac atc gaa cag gga	4537
	Asp Glu Met Glu Glu Cys Ala Ser His Leu Pro Tyr Ile Glu Gln Gly	
	900 905 910	
20	atg cag ctc gcc gaa caa ttc aaa cag aag gca atc ggg ttg ctg caa	4585
	Met Gln Leu Ala Glu Gln Phe Lys Gln Lys Ala Ile Gly Leu Leu Gln	
	915 920 925	
25	aca gcc acc aag caa gcg gag gct gct ccc gtg gtg gaa tcc aag	4633
	Thr Ala Thr Lys Gln Ala Glu Ala Ala Pro Val Val Glu Ser Lys	
	930 935 940	
30	tgg cgg acc ctc gaa gcc ttc tgg gcg aag cat atg tgg aat ttc atc	4681
	Trp Arg Thr Leu Glu Ala Phe Trp Ala Lys His Met Trp Asn Phe Ile	
	945 950 955 960	
35	agc ggg ata caa tat tta gca ggc ttg tcc act ctg cct ggc aac ccc	4729
	Ser Gly Ile Gln Tyr Leu Ala Gly Leu Ser Thr Leu Pro Gly Asn Pro	
	965 970 975	
40	gcg ata gca tca ctg atg gca ttc aca gcc tct atc acc agc ccg ctc	4777
	Ala Ile Ala Ser Leu Met Ala Phe Thr Ala Ser Ile Thr Ser Pro Leu	
	980 985 990	
45	acc acc caa cat acc ctc ctg ttt aac atc ctg ggg gga tgg gtg gcc	4825
	Thr Thr Gln His Thr Leu Leu Phe Asn Ile Leu Gly Gly Trp Val Ala	
	995 1000 1005	
50	gcc caa ctt gct cct ccc agc gct gct tct gct ttc gta ggc gcc ggc	4873
	Ala Gln Leu Ala Pro Pro Ser Ala Ala Ser Ala Phe Val Gly Ala Gly	
	1010 1015 1020	
55	atc gct gga gcg gct gtt ggc agc ata ggc ctt ggg aag gtg ctt gtg	4921
	Ile Ala Gly Ala Ala Val Gly Ser Ile Gly Leu Gly Lys Val Leu Val	
	1025 1030 1035 1040	
60	gat att ttg gca ggt tat gga gca ggg gtg gca ggc gcg ctc gtg gcc	4969
	Asp Ile Leu Ala Gly Tyr Gly Ala Gly Val Ala Gly Ala Leu Val Ala	
	1045 1050 1055	
65	ttt aag gtc atg agc ggc gag atg ccc tcc acc gag gac ctg gtt aac	5017
	Phe Lys Val Met Ser Gly Glu Met Pro Ser Thr Glu Asp Leu Val Asn	
	1060 1065 1070	
70	cta ctc cct gct atc ctc tcc cct ggc gcc cta gtc gtc ggg gtc gtg	5065

	Leu Leu Pro Ala Ile Leu Ser Pro Gly Ala Leu Val Val Gly Val Val	
	1075 1080 1085	
5	tgc gca gcg ata ctg cgt cggt cac gtc ggc cca ggg gag ggg gct gtg Cys Ala Ala Ile Leu Arg Arg His Val Gly Pro Gly Glu Gly Ala Val	5113
	1090 1095 1100	
10	cag tgg atg aac cggt ctg ata gcg ttc gct tcg cggt ggt aac cac gtc Gln Trp Met Asn Arg Leu Ile Ala Phe Ala Ser Arg Gly Asn His Val 1105 1110 1115 1120	5161
	tcc ccc acg cac tat gtg cct gag agc gac gct gca gca cgt gtc act Ser Pro Thr His Tyr Val Pro Glu Ser Asp Ala Ala Ala Arg Val Thr 1125 1130 1135	5209
15	cag atc ctc tct agt ctt acc atc act cag ctg ctg aag agg ctt cac Gln Ile Leu Ser Ser Leu Thr Ile Thr Gln Leu Leu Lys Arg Leu His 1140 1145 1150	5257
20	cag tgg atc aac gag gac tgc tcc acg cca tgc tcc ggc tcg tgg cta Gln Trp Ile Asn Glu Asp Cys Ser Thr Pro Cys Ser Gly Ser Trp Leu 1155 1160 1165	5305
25	aga gat gtt tgg gat tgg ata tgc acg gtg ttg act gat ttc aag acc Arg Asp Val Trp Asp Trp Ile Cys Thr Val Leu Thr Asp Phe Lys Thr 1170 1175 1180	5353
30	tgg ctc cag tcc aag ctc ctg ccgt cga ttg ccgt gga gtc ccc ttc ttc Trp Leu Gln Ser Lys Leu Leu Pro Arg Leu Pro Gly Val Pro Phe Phe 1185 1190 1195 1200	5401
	tca tgt caa cgt ggg tac aag gga gtc tgg ccgt ggc gac ggc atc atg Ser Cys Gln Arg Gly Tyr Lys Gly Val Trp Arg Gly Asp Gly Ile Met 1205 1210 1215	5449
35	caa acc acc tgc cca tgt gga gca cag atc acc gga cat gtg aaa aac Gln Thr Thr Cys Pro Cys Gly Ala Gln Ile Thr Gly His Val Lys Asn 1220 1225 1230	5497
40	cgt tcc atg agg atc gtg ggg cct agg acc tgt agt aac acg tgg cat Arg Ser Met Arg Ile Val Gly Pro Arg Thr Cys Ser Asn Thr Trp His 1235 1240 1245	5545
45	gga aca ttc ccc att aac gcg tac acc acg ggc ccc tgc acg ccc tcc Gly Thr Phe Pro Ile Asn Ala Tyr Thr Gly Pro Cys Thr Pro Ser 1250 1255 1260	5593
50	ccg gcg cca aat tat tct agg gcg ctg tgg ccgt gtg gct gct gag gag Pro Ala Pro Asn Tyr Ser Arg Ala Leu Trp Arg Val Ala Ala Glu Glu 1265 1270 1275 1280	5641
	tac gtg gag gtt acg cggt gtg ggg gat ttc cac tac gtg acg ggc atg Tyr Val Glu Val Thr Arg Val Gly Asp Phe His Tyr Val Thr Gly Met 1285 1290 1295	5689
55	acc act gac aac gta aag tgc ccgt tgt cag gtt ccgt gcc ccc gaa ttc Thr Thr Asp Asn Val Lys Cys Pro Cys Gln Val Pro Ala Pro Glu Phe	5737

	1300	1305	1310	
5	ttc aca gaa gtg gat ggg gtg cggttgcacaggatcgctccagtg Phe Thr Glu Val Asp Gly Val Arg Leu His Arg Tyr Ala Pro Ala Cys 1315	1320	1325	5785
	aaa ccc ctc cta cgg gag gag gtc aca ttc ctggtcggccatcaa Lys Pro Leu Leu Arg Glu Val Thr Phe Leu Val Gly Leu Asn Gln 1330	1335	1340	5833
10	tac ctg gtt ggg tca cag ctc cca tgc gag ccc gaa ccg gac gta gca Tyr Leu Val Gly Ser Gln Leu Pro Cys Glu Pro Glu Pro Asp Val Ala 1345	1350	1355	5881
15	gtg ctc act tcc atg ctc acc gac ccc tcc cac att acg gcg gag acg Val Leu Thr Ser Met Leu Thr Asp Pro Ser His Ile Thr Ala Glu Thr 1365	1370	1375	5929
20	gct aag cgt agg ctg gcc agg gga tct ccc ccc tcc ttggcc agc tca Ala Lys Arg Arg Leu Ala Arg Gly Ser Pro Pro Ser Leu Ala Ser Ser 1380	1385	1390	5977
25	tca gct agc cag ctg tct gcgccttcc aag gca aca tgc act acc Ser Ala Ser Gln Leu Ser Ala Pro Ser Leu Lys Ala Thr Cys Thr Thr 1395	1400	1405	6025
30	cgt cat gac tcc ccg gac gct gac ctc atc gag gcc aac ctc ctgtgg Arg His Asp Ser Pro Asp Ala Asp Leu Ile Glu Ala Asn Leu Leu Trp 1410	1415	1420	6073
35	cgagatggcggaaacatcaccgcgtggagtca gaa aat aag Arg Gln Glu Met Gly Gly Asn Ile Thr Arg Val Glu Ser Glu Asn Lys 1425	1430	1435	6121
40	gtatgttgcacccgttgcggatgttccaggaaa Val Val Ile Leu Asp Ser Phe Glu Pro Leu Gln Ala Glu Glu Asp Glu 1445	1450	1455	6169
45	agg gaa gta tcc gtt ccg gcggatcctgtcgagg tccaggaaa Arg Glu Val Ser Val Pro Ala Glu Ile Leu Arg Arg Ser Arg Lys Phe 1460	1465	1470	6217
	cct cga gcg atg ccc ata tgg gca cgc ccg gat tac aac cct cca ctg Pro Arg Ala Met Pro Ile Trp Ala Arg Pro Asp Tyr Asn Pro Pro Leu 1475	1480	1485	6265
50	ttagatcc tgg aag gac ccg gac tac gtc cct cca gtggatcacgg Leu Glu Ser Trp Lys Asp Pro Asp Tyr Val Pro Pro Val Val His Gly 1490	1495	1500	6313
	tgt cca ctg ccgcctgcc aag gcc cct ccg ata cca cct cca cgg agg Cys Pro Leu Pro Ala Lys Ala Pro Pro Ile Pro Pro Pro Arg Arg 1505	1510	1515	6361
55	aaggaggacgttgcctgcata gaa tct acc gtgtcttgc ttggc Lys Arg Thr Val Val Leu Ser Glu Ser Thr Val Ser Ser Ala Leu Ala 1525	1530	1535	6409

	gag ctc gcc aca aag acc ttc ggc agc tcc gaa tcg tcg gcc gtc gac	6457
	Glu Leu Ala Thr Lys Thr Phe Gly Ser Ser Glu Ser Ser Ala Val Asp	
	1540 1545 1550	
5	agc ggc acg gca acg gcc tct cct gac cag ccc tcc gac gac ggc gac	6505
	Ser Gly Thr Ala Thr Ala Ser Pro Asp Gln Pro Ser Asp Asp Gly Asp	
	1555 1560 1565	
10	gcg gga tcc gac gtt gag tcg tac tcc atg ccc ccc ctt gag ggg	6553
	Ala Gly Ser Asp Val Glu Ser Tyr Ser Ser Met Pro Pro Leu Glu Gly	
	1570 1575 1580	
15	gag ccg ggg gat ccc gat ctc agc gac ggg cct tgg tct acc gta agc	6601
	Glu Pro Gly Asp Pro Asp Leu Ser Asp Gly Pro Trp Ser Thr Val Ser	
	1585 1590 1595 1600	
20	gag gag gct agt gag gac gtc gtc tgc tcg atg tcc tac aca tgg	6649
	Glu Glu Ala Ser Glu Asp Val Val Cys Cys Ser Met Ser Tyr Thr Trp	
	1605 1610 1615	
	aca ggc gcc ctg atc acg cca tgc gct gcg gag gaa acc aag ctg ccc	6697
	Thr Gly Ala Leu Ile Thr Pro Cys Ala Ala Glu Glu Thr Lys Leu Pro	
	1620 1625 1630	
25	atc aat gca ctg agc aac tct ttg ctc cgt cac cac aac ttg gtc tat	6745
	Ile Asn Ala Leu Ser Asn Ser Leu Leu Arg His His Asn Leu Val Tyr	
	1635 1640 1645	
30	gct aca aca tct cgc agc gca agc ctg cgg cag aag aag gtc acc ttt	6793
	Ala Thr Thr Ser Arg Ser Ala Ser Leu Arg Gln Lys Lys Val Thr Phe	
	1650 1655 1660	
35	gac aga ctg cag gtc ctg gac gac cac tac cgg gac gtg ctc aag gag	6841
	Asp Arg Leu Gln Val Leu Asp Asp His Tyr Arg Asp Val Leu Lys Glu	
	1665 1670 1675 1680	
40	atg aag gcg aag gcg tcc aca gtt aag gct aaa ctt cta tcc gtg gag	6889
	Met Lys Ala Lys Ala Ser Thr Val Lys Ala Lys Leu Leu Ser Val Glu	
	1685 1690 1695	
	gaa gcc tgt aag ctg acg ccc cca cat tcg gcc aga tct aaa ttt ggc	6937
	Glu Ala Cys Lys Leu Thr Pro Pro His Ser Ala Arg Ser Lys Phe Gly	
	1700 1705 1710	
45	tat ggg gca aag gac gtc cgg aac cta tcc agc aag gcc gtt aac cac	6985
	Tyr Gly Ala Lys Asp Val Arg Asn Leu Ser Ser Lys Ala Val Asn His	
	1715 1720 1725	
50	atc cgc tcc gtg tgg aag gac ttg ctg gaa gac act gag aca cca att	7033
	Ile Arg Ser Val Trp Lys Asp Leu Leu Glu Asp Thr Glu Thr Pro Ile	
	1730 1735 1740	
55	gac acc acc atc atg gca aaa aat gag gtt ttc tgc gtc caa cca gag	7081
	Asp Thr Thr Ile Met Ala Lys Asn Glu Val Phe Cys Val Gln Pro Glu	
	1745 1750 1755 1760	

	aag ggg ggc cgc aag cca gct cgc ctt atc gta ttc cca gat ttg ggg Lys Gly Gly Arg Lys Pro Ala Arg Leu Ile Val Phe Pro Asp Leu Gly 1765 1770 1775	7129
5	gtt cgt gtg tgc gag aaa atg gcc ctt tac gat gtg gtc tcc acc ctc Val Arg Val Cys Glu Lys Met Ala Leu Tyr Asp Val Val Ser Thr Leu 1780 1785 1790	7177
10	cct cag gcc gtg atg ggc tct tca tac gga ttccaa tac tct cct gga Pro Gln Ala Val Met Gly Ser Ser Tyr Gly Phe Gln Tyr Ser Pro Gly 1795 1800 1805	7225
15	cag cgg gtc gag ttc ctg gtg aat gcc tgg aaa gcg aag aaa tgc cct Gln Arg Val Glu Phe Leu Val Asn Ala Trp Lys Ala Lys Lys Cys Pro 1810 1815 1820	7273
20	atg ggc ttc gca tat gac acc cgc tgt ttt gac tca acg gtc act gag Met Gly Phe Ala Tyr Asp Thr Arg Cys Phe Asp Ser Thr Val Thr Glu 1825 1830 1835 1840	7321
	aat gac atc cgt gtt gag gag tca atc tac caa tgt tgt gac ttg gcc Asn Asp Ile Arg Val Glu Glu Ser Ile Tyr Gln Cys Cys Asp Leu Ala 1845 1850 1855	7369
25	ccc gaa gcc aga cag gcc ata agg tcg ctc aca gag cgg ctt tac atc Pro Glu Ala Arg Gln Ala Ile Arg Ser Leu Thr Glu Arg Leu Tyr Ile 1860 1865 1870	7417
30	ggg ggc ccc ctg act aat tct aaa ggg cag aac tgc ggc tat cgc cgg Gly Gly Pro Leu Thr Asn Ser Lys Gly Gln Asn Cys Gly Tyr Arg Arg 1875 1880 1885	7465
35	tgc cgc gcg agc ggt gta ctg acg acc agc tgc ggt aat acc ctc aca Cys Arg Ala Ser Gly Val Leu Thr Thr Ser Cys Gly Asn Thr Leu Thr 1890 1895 1900	7513
40	tgt tac ttg aag gcc gct gcg gcc tgt cga gct gcg aag ctc cag gac Cys Tyr Leu Lys Ala Ala Ala Cys Arg Ala Ala Lys Leu Gln Asp 1905 1910 1915 1920	7561
	tgc acg atg ctc gta tgc gga gac gac ctt gtc gtt atc tgt gaa agc Cys Thr Met Leu Val Cys Gly Asp Asp Leu Val Val Ile Cys Glu Ser 1925 1930 1935	7609
45	gcg ggg acc caa gag gac gag gcg agc cta cgg gcc ttc acg gag gct Ala Gly Thr Gln Glu Asp Glu Ala Ser Leu Arg Ala Phe Thr Glu Ala 1940 1945 1950	7657
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55	gac ttg gag ttg ata aca tca tgc tcc tcc aat gtg tca gtc gcg cac Asp Leu Glu Leu Ile Thr Ser Cys Ser Ser Asn Val Ser Val Ala His 1970 1975 1980	7753
	gat gca tct ggc aaa agg gtg tac tat ctc acc cgt gac ccc acc acc	7801

	Asp Ala Ser Gly Lys Arg Val Tyr Tyr Leu Thr Arg Asp Pro Thr Thr			
1985	1990	1995	2000	
5	ccc ctt gcg cggtt gct gca gag aca gct aga cac act cca gtc aat Pro Leu Ala Arg Ala Ala Trp Glu Thr Ala Arg His Thr Pro Val Asn	2005	2010	2015
10	tcc tgg cta ggc aac atc atc atg tat gcg ccc acc ttg tgg gca agg Ser Trp Leu Gly Asn Ile Ile Met Tyr Ala Pro Thr Leu Trp Ala Arg	2020	2025	2030
15	atg atc ctg atg act cat ttc ttc atc ctt cta gct cag gaa caa Met Ile Leu Met Thr His Phe Phe Ser Ile Leu Leu Ala Gln Glu Gln	2035	2040	2045
20	ctt gaa aaa gcc cta gat tgt cag atc tac ggg gcc tgt tac tcc att Leu Glu Lys Ala Leu Asp Cys Gln Ile Tyr Gly Ala Cys Tyr Ser Ile	2050	2055	2060
25	gag cca ctt gac cta cct cag atc att caa cga ctc cac ggc ctt agc Glu Pro Leu Asp Leu Pro Gln Ile Ile Gln Arg Leu His Gly Leu Ser	2065	2070	2075
30	gca ttt tca ctc cat agt tac tct cca ggt gag atc aat agg gtg gct Ala Phe Ser Leu His Ser Tyr Ser Pro Gly Glu Ile Asn Arg Val Ala	2085	2090	2095
35	tca tgc ctc agg aaa ctt ggg gta ccg ccc ttg cga gtc tgg aga cat Ser Cys Leu Arg Lys Leu Gly Val Pro Pro Leu Arg Val Trp Arg His	2100	2105	2110
40	cgg gcc aga agt gtc cgc gct agg cta ctg tcc cag ggg ggg agg gct Arg Ala Arg Ser Val Arg Ala Arg Leu Leu Ser Gln Gly Gly Arg Ala	2115	2120	2125
45	gcc act tgt ggc aag tac ctc ttc aac tgg gca gta agg acc aag ctc Ala Thr Cys Gly Lys Tyr Leu Phe Asn Trp Ala Val Arg Thr Lys Leu	2130	2135	2140
50	aaa ctc act cca atc ccg gct gcg tcc cag ttg gat tta tcc agc tgg Lys Leu Thr Pro Ile Pro Ala Ala Ser Gln Leu Asp Leu Ser Ser Trp	2145	2150	2155
55	ttc gtt gct ggt tac agc ggg gga gac ata tat cac agc ctg tct cgt Phe Val Ala Gly Tyr Ser Gly Gly Asp Ile Tyr His Ser Leu Ser Arg	2165	2170	2175
	gcc cga ccc cgc tgg ttc atg tgg tgc cta ctc cta ctt tct gta ggg Ala Arg Pro Arg Trp Phe Met Trp Cys Leu Leu Leu Ser Val Gly	2180	2185	2190
	gta ggc atc tat cta ctc ccc aac cga tga acggggagct aaacactcca Val Gly Ile Tyr Leu Leu Pro Asn Arg *	2195	2200	8427
	ggccaatagg ccatcctgtt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttttttt tttttccctc ttttttttcc ttttcttcc tttgggtggct	8487	8547	

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 gacgaccggg tccttcttg gatcaacccg ctcaatgcct ggagatttg gcgtcccccc 240
 gcgagactgc tagccgagta gtgttgggtc gcgaaaggcc ttgtggtaact gcctgatagg 300
 gtgcttgcga gtccccggg aggtctcgta gaccgtgcac catgagcacg aatcctaaac 360

20 20 ctc当地 aacc当地 aacccaaaaggc cgccatgta ttgaaacaaga tggattgcac gcaggttctc 420
 cggccgctt ggtggagagg ctattcgct atgactggc acaacagaca atcggctgtc 480
 ctgatgcccgc cgtgttccgg ctgtcagcgc agggggcgcggg gtttctttt gtcaagaccg 540
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25 25 tgcttatttggg cgaagtgcgg gggcaggatc tcctgtcatc tcaccttgcct cctgcccaga 720
 aagtatccat catggctgtat gcaatgcggc ggctgcatac gtttgcattcg gctacctgccc 780
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45 45 Met Asp Arg Glu Met Ala Ala Ser Cys Gly Gly Ala Val Phe Val Gly
 1 5 10 15

ctg ata ctc ttg acc ttg tca ccg cac tat aag ctg ttc ctc gct agg 1897
 Leu Ile Leu Leu Thr Leu Ser Pro His Tyr Lys Leu Phe Leu Ala Arg
 50 20 25 30

ctc ata tgg tgg tta caa tat ttt atc acc agg gcc gag gca cac ttg 1945
 Leu Ile Trp Trp Leu Gln Tyr Phe Ile Thr Arg Ala Glu Ala His Leu
 35 40 45

55 caa gtg tgg atc ccc ccc ctc aac gtt cgg ggg ggc cgc gat gcc gtc 1993
 Gln Val Trp Ile Pro Pro Leu Asn Val Arg Gly Gly Arg Asp Ala Val

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	aaa atc ttg ctc gcc ata ctc ggt cca ctc atg gtg ctc cag gct ggt Lys Ile Leu Leu Ala Ile Leu Gly Pro Leu Met Val Leu Gln Ala Gly 85	90	95	2089	
10	ata acc aaa gtg ccg tac ttc gtg cgc gca cac ggg ctc att cgt gca Ile Thr Lys Val Pro Tyr Phe Val Arg Ala His Gly Leu Ile Arg Ala 100	105	110	2137	
15	tgc atg ctg gtg cg ^g aag gtt gct ggg ggt cat tat gtc caa atg gct Cys Met Leu Val Arg Lys Val Ala Gly Gly His Tyr Val Gln Met Ala 115	120	125	2185	
20	ctc atg aag ttg gcc gca ctg aca ggt acg tac gtt tat gac cat ctc Leu Met Lys Leu Ala Ala Leu Thr Gly Thr Tyr Val Tyr Asp His Leu 130	135	140	2233	
25	acc cca ctg cg ^g gac tgg gcc cac gcg ggc cta cga gac ctt gcg gtg Thr Pro Leu Arg Asp Trp Ala His Ala Gly Leu Arg Asp Leu Ala Val 145	150	155	160	2281
	gca gtt gag ccc gtc gtc ttc tct gat atg gag acc aag gtt atc acc Ala Val Glu Pro Val Val Phe Ser Asp Met Glu Thr Lys Val Ile Thr 165	170	175	2329	
30	tgg ggg gca gac acc gcg gcg tgt ggg gac atc atc ttg ggc ctg ccc Trp Gly Ala Asp Thr Ala Ala Cys Gly Asp Ile Ile Leu Gly Leu Pro 180	185	190	2377	
35	gtc tcc gcc cgc agg ggg agg gag ata cat ctg gga ccg gca gac agc Val Ser Ala Arg Arg Gly Arg Glu Ile His Leu Gly Pro Ala Asp Ser 195	200	205	2425	
40	ctt gaa ggg cag ggg tgg cga ctc ctc gcg cct att acg gcc tac tcc Leu Glu Gly Gln Gly Trp Arg Leu Leu Ala Pro Ile Thr Ala Tyr Ser 210	215	220	2473	
45	caa cag acg cga ggc cta ctt ggc tgc atc atc acc agc ctc aca ggc Gln Gln Thr Arg Gly Leu Leu Gly Cys Ile Ile Thr Ser Leu Thr Gly 225	230	235	2521	240
	cgg gac agg aac cag gtc gag ggg gag gtc caa gtg gtc tcc acc gca Arg Asp Arg Asn Gln Val Glu Gly Glu Val Gln Val Val Ser Thr Ala 245	250	255	2569	
50	aca caa tct ttc ctg gc ^g acc tgc gtc aat ggc gtg tgt tgg act gtc Thr Gln Ser Phe Leu Ala Thr Cys Val Asn Gly Val Cys Trp Thr Val 260	265	270	2617	
55	tat cat ggt gcc ggc tca aag acc ctt gcc ggc cca aag ggc cca atc Tyr His Gly Ala Gly Ser Lys Thr Leu Ala Gly Pro Lys Gly Pro Ile 275	280	285	2665	

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	Pro Pro Gly Ala Arg Ser Leu Thr Pro Cys Thr Cys Gly Ser Ser Asp	
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	Leu Tyr Leu Val Thr Lys His Ala Asp Val Ile Pro Val Arg Arg Arg	
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	Gly Asp Ser Arg Gly Ser Leu Leu Ser Pro Arg Pro Val Ser Tyr Leu	
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	Lys Gly Ser Ser Gly Gly Pro Leu Leu Cys Pro Ser Gly His Ala Val	
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	Gly Ile Phe Arg Ala Ala Val Cys Thr Arg Gly Val Ala Lys Ala Val	
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	Asp Phe Val Pro Val Glu Ser Met Glu Thr Thr Met Arg Ser Pro Val	
	385 390 395 400	
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	Phe Thr Asp Asn Ser Ser Pro Pro Ala Val Pro Gln Thr Phe Gln Val	
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	Ala His Leu His Ala Pro Thr Gly Ser Gly Lys Ser Thr Lys Val Pro	
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	Ala Ala Tyr Ala Ala Gln Gly Tyr Lys Val Leu Val Leu Asn Pro Ser	
	435 440 445	
50	gtc gcc gcc acc cta ggt ttc ggg gcg tat atg tct aag gca cat ggt	3193
	Val Ala Ala Thr Leu Gly Phe Gly Ala Tyr Met Ser Lys Ala His Gly	
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	Ile Asp Pro Asn Ile Arg Thr Gly Val Arg Thr Ile Thr Thr Gly Ala	
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	Pro Ile Thr Tyr Ser Thr Tyr Gly Lys Phe Leu Ala Asp Gly Gly Cys	
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	Ser Gly Gly Ala Tyr Asp Ile Ile Cys Asp Glu Cys His Ser Thr	
	500 505 510	

	gac tcg acc act atc ctg ggc atc ggc aca gtc ctg gac caa gcg gag	3385
	Asp Ser Thr Thr Ile Leu Gly Ile Gly Thr Val Leu Asp Gln Ala Glu	
	515 520 525	
5	acg gct gga gcg cga ctc gtc gtg ctc gcc acc gct acg cct ccg gga	3433
	Thr Ala Gly Ala Arg Leu Val Val Leu Ala Thr Ala Thr Pro Pro Gly	
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	Ser Val Thr Val Pro His Pro Asn Ile Glu Glu Val Ala Leu Ser Ser	
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15	act gga gaa atc ccc ttt tat ggc aaa gcc atc ccc atc gag acc atc	3529
	Thr Gly Glu Ile Pro Phe Tyr Gly Lys Ala Ile Pro Ile Glu Thr Ile	
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20	aag ggg ggg agg cac ctc att ttc tgc cat tcc aag aag aaa tgc gat	3577
	Lys Gly Gly Arg His His Leu Ile Phe Cys His Ser Lys Lys Lys Cys Asp	
	580 585 590	
25	gag ctc gcc gcg aag ctg tcc ggc ctc gga ctc aat gct gta gca tat	3625
	Glu Leu Ala Ala Lys Leu Ser Gly Leu Gly Leu Asn Ala Val Ala Tyr	
	595 600 605	
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	Tyr Arg Gly Leu Asp Val Ser Val Ile Pro Thr Ser Gly Asp Val Ile	
	610 615 620	
35	gtc gta gca acg gac gct cta atg acg ggc ttt acc ggc gat ttc gac	3721
	Val Val Ala Thr Asp Ala Leu Met Thr Gly Phe Thr Gly Asp Phe Asp	
	625 630 635 640	
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	Ser Val Ile Asp Cys Asn Thr Cys Val Thr Gln Thr Val Asp Phe Ser	
	645 650 655	
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	Leu Asp Pro Thr Phe Thr Ile Glu Thr Thr Val Pro Gln Asp Ala	
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	Val Ser Arg Ser Gln Arg Arg Gly Arg Thr Gly Arg Gly Arg Met Gly	
	675 680 685	
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	Ile Tyr Arg Phe Val Thr Pro Gly Glu Arg Pro Ser Gly Met Phe Asp	
	690 695 700	
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	Ser Ser Val Leu Cys Glu Cys Tyr Asp Ala Gly Cys Ala Trp Tyr Glu	
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65	ctc acg ccc gcc gag acc tca gtt agg ttg cgg gct tac cta aac aca	4009
	Leu Thr Pro Ala Glu Thr Ser Val Arg Leu Arg Ala Tyr Leu Asn Thr	
	725 730 735	
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5	ttt	aca	ggc	ctc	acc	cac	ata	gac	gcc	cat	ttc	ttg	tcc	cag	act	aag	4105
	Phe	Thr	Gly	Leu	Thr	His	Ile	Asp	Ala	His	Phe	Leu	Ser	Gln	Thr	Lys	
				755					760				765				
10	cag	gca	gga	gac	aac	ttc	ccc	tac	ctg	gta	gca	tac	cag	gct	acg	gtg	4153
	Gln	Ala	Gly	Asp	Asn	Phe	Pro	Tyr	Leu	Val	Ala	Tyr	Gln	Ala	Thr	Val	
				770			775				780						
15	tgc	gcc	agg	gct	cag	gct	cca	cct	cca	tcg	tgg	gac	caa	atg	tgg	aag	4201
	Cys	Ala	Arg	Ala	Gln	Ala	Pro	Pro	Pro	Ser	Trp	Asp	Gln	Met	Trp	Lys	
				785			790			795			800				
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	Thr	Lys	Tyr	Ile	Met	Ala	Cys	Met	Ser	Ala	Asp	Leu	Glu	Val	Val	Thr	
				835			840			845							
35	agc	acc	tgg	ctg	gta	ggc	gga	gtc	cta	gca	gct	ctg	gct	gcg	tat	4393	
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	Cys	Leu	Thr	Thr	Gly	Ser	Val	Val	Ile	Val	Gly	Arg	Ile	Ile	Leu	Ser	
				865			870			875			880				
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	Gly	Arg	Pro	Ala	Ile	Ile	Pro	Asp	Arg	Glu	Val	Leu	Tyr	Arg	Glu	Phe	
				885			890			895							
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	Asp	Glu	Met	Glu	Glu	Cys	Ala	Ser	His	Leu	Pro	Tyr	Ile	Glu	Gln	Gly	
				900			905			910							
55	atg	cag	ctc	gcc	gaa	caa	ttc	aaa	cag	aag	gca	atc	ggg	ttg	ctg	caa	4585
	Met	Gln	Leu	Ala	Glu	Gln	Phe	Lys	Gln	Lys	Ala	Ile	Gly	Leu	Leu	Gln	
				915			920			925							
60	aca	gcc	acc	aag	caa	gcg	gag	gct	gct	ccc	gtg	gtg	gaa	tcc	aag	4633	
	Thr	Ala	Thr	Lys	Gln	Ala	Glu	Ala	Ala	Ala	Pro	Val	Val	Glu	Ser	Lys	
				930			935			940							
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	Trp	Arg	Thr	Leu	Glu	Ala	Phe	Trp	Ala	Lys	His	Met	Trp	Asn	Phe	Ile	
				945			950			955			960				
70	agc	ggg	ata	caa	tat	tta	gca	ggc	ttg	tcc	act	ctg	cct	ggc	aac	ccc	4729
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	Thr Thr Gln His Thr Leu Leu Phe Asn Ile Leu Gly Gly Trp Val Ala			
	995	1000	1005	
10	gcc caa ctt gct cct ccc agc gct gct tcc gta ggc gcc ggc			4873
	Ala Gln Leu Ala Pro Pro Ser Ala Ala Ser Ala Phe Val Gly Ala Gly			
	1010	1015	1020	
15	atc gct gga gcg gct gtt ggc agc ata ggc ctt ggg aag gtg ctt gtg			4921
	Ile Ala Gly Ala Ala Val Gly Ser Ile Gly Leu Gly Lys Val Leu Val			
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20	gat att ttg gca ggt tat gga gca ggg gtg gca ggc gcg ctc gtg gcc			4969
	Asp Ile Leu Ala Gly Tyr Gly Ala Gly Val Ala Gly Ala Leu Val Ala			
	1045	1050	1055	
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	Cys Ala Ala Ile Leu Arg Arg His Val Gly Pro Gly Glu Gly Ala Val			
	1090	1095	1100	
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	Gln Trp Met Asn Arg Leu Ile Ala Phe Ala Ser Arg Gly Asn His Val			
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45	tcc ccc acg cac tat gtg cct gag agc gac gct gca gca cgt gtc act			5209
	Ser Pro Thr His Tyr Val Pro Glu Ser Asp Ala Ala Arg Val Thr			
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	Gln Ile Leu Ser Ser Leu Thr Ile Thr Gln Leu Leu Lys Arg Leu His			
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55	cag tgg atc aac gag gac tgc tcc acg cca tgc tcc ggc tcg tgg cta			5305
	Gln Trp Ile Asn Glu Asp Cys Ser Thr Pro Cys Ser Gly Ser Trp Leu			
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	Arg Asp Val Trp Asp Trp Ile Cys Thr Val Leu Thr Asp Phe Lys Ala			
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	Trp Leu Gln Ser Lys Leu Leu Pro Arg Leu Pro Gly Val Pro Phe Phe			
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	Ser Cys Gln Arg Gly Tyr Lys Gly Val Trp Arg Gly Asp Gly Ile Met	
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	Gln Thr Thr Cys Pro Cys Gly Ala Gln Ile Thr Gly His Val Lys Asn	
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	Cys Ser Met Arg Ile Val Gly Pro Arg Thr Cys Ser Asn Thr Trp His	
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	Gly Thr Phe Pro Ile Asn Ala Tyr Thr Gly Pro Cys Thr Pro Ser	
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	Tyr Val Glu Val Thr Arg Val Gly Asp Phe His Tyr Val Thr Gly Met	
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	Thr Thr Asp Asn Val Lys Cys Pro Cys Gln Val Pro Ala Pro Glu Phe	
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	Phe Thr Glu Val Asp Gly Val Arg Leu His Arg Tyr Ala Pro Ala Cys	
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	Lys Pro Leu Leu Arg Glu Val Thr Phe Leu Val Gly Leu Asn Gln	
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	Val Leu Thr Ser Met Leu Thr Asp Pro Ser His Ile Thr Ala Glu Thr	
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	Ala Lys Arg Arg Leu Ala Arg Gly Ser Pro Pro Ser Leu Ala Ser Ser	
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	Arg His Asp Ser Pro Asp Ala Asp Leu Ile Glu Ala Asn Leu Leu Trp	
	1410 1415 1420	

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	Asp Arg Leu Gln Val Leu Asp Asp His Tyr Arg Asp Val Leu Lys Glu		
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	Glu Ala Cys Lys Leu Thr Pro Pro His Ser Ala Arg Ser Lys Phe Gly		
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15	tat ggg gca aag gac gtc cgg aac cta tcc agc aag gcc gtt aac cac		6985
	Tyr Gly Ala Lys Asp Val Arg Asn Leu Ser Ser Lys Ala Val Asn His		
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	Ile Arg Ser Val Trp Lys Asp Leu Leu Glu Asp Thr Glu Thr Pro Ile		
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	Asp Thr Thr Ile Met Ala Lys Asn Glu Val Phe Cys Val Gln Pro Glu		
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	Lys Gly Gly Arg Lys Pro Ala Arg Leu Ile Val Phe Pro Asp Leu Gly		
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	Val Arg Val Cys Glu Lys Met Ala Leu Tyr Asp Val Val Ser Thr Leu		
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	Pro Gln Ala Val Met Gly Ser Ser Tyr Gly Phe Gln Tyr Ser Pro Gly		
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	Gln Arg Val Glu Phe Leu Val Asn Ala Trp Lys Ala Lys Lys Cys Pro		
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	Met Gly Phe Ala Tyr Asp Thr Arg Cys Phe Asp Ser Thr Val Thr Glu		
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	Asn Asp Ile Arg Val Glu Glu Ser Ile Tyr Gln Cys Cys Asp Leu Ala		
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	ccc gaa gcc aga cag gcc ata agg tcg ctc aca gag cgg ctt tac atc		7417
	Pro Glu Ala Arg Gln Ala Ile Arg Ser Leu Thr Glu Arg Leu Tyr Ile		
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	Gly Gly Pro Leu Thr Asn Ser Lys Gly Gln Asn Cys Gly Tyr Arg Arg		

	1875	1880	1885	
	tgc cgc gcg agc ggt gta ctg acg acc agc tgc ggt aat acc ctc aca Cys Arg Ala Ser Gly Val Leu Thr Thr Ser Cys Gly Asn Thr Leu Thr			7513
5	1890	1895	1900	
	tgt tac ttg aag gcc gct gcg gcc tgt cga gct gcg aag ctc cag gac Cys Tyr Leu Lys Ala Ala Ala Cys Arg Ala Ala Lys Leu Gln Asp			7561
10	1905	1910	1915	1920
	tgc acg atg ctc gta tgc gga gac gac ctt gtc gtt atc tgt gaa agc Cys Thr Met Leu Val Cys Gly Asp Asp Leu Val Val Ile Cys Glu Ser			7609
	1925	1930	1935	
15	gcg ggg acc caa gag gac gag gcg agc cta cgg gcc ttc acg gag gct Ala Gly Thr Gln Glu Asp Glu Ala Ser Leu Arg Ala Phe Thr Glu Ala			7657
	1940	1945	1950	
20	atg act aga tac tct gcc ccc cct ggg gac ccg ccc aaa cca gaa tac Met Thr Arg Tyr Ser Ala Pro Pro Gly Asp Pro Pro Lys Pro Glu Tyr			7705
	1955	1960	1965	
25	gac ttg gag ttg ata aca tca tgc tcc tcc aat gtg tca gtc gcg cac Asp Leu Glu Leu Ile Thr Ser Cys Ser Ser Asn Val Ser Val Ala His			7753
	1970	1975	1980	
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	1985	1990	1995	2000
35	ccc ctt gcg cgg gct gcg tgg gag aca gct aga cac act cca gtc aat Pro Leu Ala Arg Ala Ala Trp Glu Thr Ala Arg His Thr Pro Val Asn			7849
	2005	2010	2015	
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45	atg atc ctg atg act cat ttc ttc tcc atc ctt cta gct cag gaa caa Met Ile Leu Met Thr His Phe Phe Ser Ile Leu Leu Ala Gln Glu Gln			7945
	2035	2040	2045	
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	2050	2055	2060	
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	2065	2070	2075	2080
60	gca ttt tca ctc cat agt tac tct cca ggt gag atc aat agg gtg gct Ala Phe Ser Leu His Ser Tyr Ser Pro Gly Glu Ile Asn Arg Val Ala			8089
	2085	2090	2095	
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 2115 2120 2125

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	Tyr His Gly Ala Gly Ser Lys Thr Leu Ala Gly Pro Lys Gly Pro Ile	
	275 280 285	
50	acc caa atg tac acc aat gtg gac cag gac ctc gtc ggc tgg caa gcg	2713
	Thr Gln Met Tyr Thr Asn Val Asp Gln Asp Leu Val Gly Trp Gln Ala	
	290 295 300	
55	ccc ccc ggg gcg cgt tcc ttg aca cca tgc acc tgc ggc agc tcg gac	2761
	Pro Pro Gly Ala Arg Ser Leu Thr Pro Cys Thr Cys Gly Ser Ser Asp	
	305 310 315 320	
	ctt tac ttg gtc acg agg cat gcc gat gtc att ccg gtg cgc cgg cgg	2809

	Leu	Tyr	Leu	Val	Thr	Arg	His	Ala	Asp	Val	Ile	Pro	Val	Arg	Arg	Arg	
					325					330				335			
5	ggc	gac	agc	agg	ggg	agc	cta	ctc	tcc	ccc	agg	ccc	gtc	tcc	tac	ttg	
	Gly	Asp	Ser	Arg	Gly	Ser	Leu	Leu	Ser	Pro	Arg	Pro	Val	Ser	Tyr	Leu	
					340				345				350				
10	aag	ggc	tct	tcg	ggc	ggt	cca	ctg	ctc	tgc	ccc	tcg	ggg	cac	gct	gtg	
	Lys	Gly	Ser	Ser	Gly	Gly	Pro	Leu	Leu	Cys	Pro	Ser	Gly	His	Ala	Val	
					355				360				365				
15	ggc	atc	ttt	cg	gct	gcc	gtg	tgc	acc	cga	ggg	gtt	g	cg	aag	g	gtg
	Gly	Ile	Phe	Arg	Ala	Ala	Val	Cys	Thr	Arg	Gly	Val	Ala	Lys	Ala	Val	
					370			375				380					
20	gac	ttt	gta	ccc	gtc	gag	tct	atg	gaa	acc	act	atg	cgg	tcc	ccg	gtc	
	Asp	Phe	Val	Pro	Val	Glu	Ser	Met	Glu	Thr	Arg	Gly	Val	Ala	Lys	Ala	
					385			390				395				400	
25	ttc	acg	gac	aac	tcg	tcc	cct	ccg	gcc	gta	ccg	cag	aca	ttc	cag	gtg	
	Phe	Thr	Asp	Asn	Ser	Ser	Pro	Pro	Ala	Val	Pro	Gln	Thr	Phe	Gln	Val	
					405				410				415				
30	gcc	cat	cta	cac	gcc	cct	act	gg	gt	agc	ggc	aag	agc	act	aag	gtg	ccg
	Ala	His	Leu	His	Ala	Pro	Thr	Gly	Ser	Gly	Lys	Ser	Thr	Lys	Val	Pro	
					420				425				430				
35	gct	gcg	tat	gca	gcc	caa	ggg	tat	aag	gtg	ctt	gtc	ctg	aac	ccg	tcc	
	Ala	Ala	Tyr	Ala	Ala	Gln	Gly	Tyr	Lys	Val	Leu	Val	Leu	Asn	Pro	Ser	
					435			440				445					
40	gtc	gcc	gcc	acc	cta	gg	t	tc	gg	gcg	tat	atg	tct	aag	gca	cat	gt
	Val	Ala	Ala	Thr	Leu	Gly	Phe	Gly	Ala	Tyr	Met	Ser	Lys	Ala	His	Gly	
					450			455				460					
45	atc	gac	cct	aac	atc	aga	acc	ggg	gta	agg	acc	atc	acc	acg	gg	gc	
	Ile	Asp	Pro	Asn	Ile	Arg	Thr	Gly	Val	Arg	Thr	Ile	Thr	Thr	Gly	Ala	
					465			470				475				480	
50	ccc	atc	acg	tac	tcc	acc	tat	ggc	aag	ttt	ctt	gcc	gac	gg	gt	tg	
	Pro	Ile	Thr	Tyr	Ser	Thr	Tyr	Gly	Lys	Phe	Leu	Ala	Asp	Gly	Gly	Cys	
					485				490				495				
55	tct	ggg	ggc	tat	gac	atc	ata	ata	tgt	gat	gag	tgc	cac	tca	act		
	Ser	Gly	Gly	Ala	Tyr	Asp	Ile	Ile	Ile	Cys	Asp	Glu	Cys	His	Ser	Thr	
					500				505				510				
60	gac	tcg	acc	act	atc	ctg	ggc	atc	ggc	aca	gtc	ctg	gac	caa	g	cg	
	Asp	Ser	Thr	Thr	Ile	Leu	Gly	Ile	Gly	Thr	Val	Leu	Asp	Gln	Ala	Glu	
					515				520				525				
65	acg	gct	gga	g	cg	cga	ctc	gt	ctc	ggc	acc	g	ct	cct	ccg	g	
	Thr	Ala	Gly	Ala	Arg	Leu	Val	Val	Leu	Ala	Thr	Ala	Thr	Pro	Pro	Gly	
					530			535				540					
70	tcg	gtc	acc	gt	cca	cat	cca	aac	atc	gag	gag	gt	g	ct	tcc	ag	
	Ser	Val	Thr	Val	Pro	His	Pro	Asn	Ile	Glu	Glu	Val	Ala	Leu	Ser	Ser	
					545				550				555				

	545	550	555	560	
	act gga gaa atc ccc ttt tat ggc aaa gcc atc ccc atc gag acc atc				3529
5	Thr Gly Ile Pro Phe Tyr Gly Lys Ala Ile Pro Ile Glu Thr Ile				
	565	570	575		
	aag ggg ggg agg cac ctc att ttc tgc cat tcc aag aag aaa tgt gat				3577
	Lys Gly Gly Arg His Leu Ile Phe Cys His Ser Lys Lys Cys Asp				
	580	585	590		
10	gag ctc gcc gcg aag ctg tcc ggc ctc gga ctc aat gct gta gca tat				3625
	Glu Leu Ala Ala Lys Leu Ser Gly Leu Gly Leu Asn Ala Val Ala Tyr				
	595	600	605		
15	tac cgg ggc ctt gat gta tcc gtc ata cca act agc gga gac gtc att				3673
	Tyr Arg Gly Leu Asp Val Ser Val Ile Pro Thr Ser Gly Asp Val Ile				
	610	615	620		
20	gtc gta gca acg gac gct cta atg acg ggc ttt acc ggc gat ttc gac				3721
	Val Val Ala Thr Asp Ala Leu Met Thr Gly Phe Thr Gly Asp Phe Asp				
	625	630	635	640	
25	tca gtg atc gac tgc aat aca tgt gtc acc cag aca gtc gac ttc agc				3769
	Ser Val Ile Asp Cys Asn Thr Cys Val Thr Gln Thr Val Asp Phe Ser				
	645	650	655		
30	ctg gac ccg acc ttc acc att gag acg acg acc gtg cca caa gac gcg				3817
	Leu Asp Pro Thr Phe Thr Ile Glu Thr Thr Val Pro Gln Asp Ala				
	660	665	670		
35	gtg tca cgc tcg cag cgg cga ggc agg act ggt agg ggc agg atg ggc				3865
	Val Ser Arg Ser Gln Arg Arg Gly Arg Thr Gly Arg Gly Arg Met Gly				
	675	680	685		
40	att tac agg ttt gtg act cca gga gaa cgg ccc tcg ggc atg ttc gat				3913
	Ile Tyr Arg Phe Val Thr Pro Gly Glu Arg Pro Ser Gly Met Phe Asp				
	690	695	700		
45	tcc tcg gtt ctg tgc gag tgc tat gac gcg ggc tgt gct tgg tac gag				3961
	Ser Ser Val Leu Cys Glu Cys Tyr Asp Ala Gly Cys Ala Trp Tyr Glu				
	705	710	715	720	
50	ctc acg ccc gcc gag acc tca gtt agg ttg cgg gct tac cta aac aca				4009
	Leu Thr Pro Ala Glu Thr Ser Val Arg Leu Arg Ala Tyr Leu Asn Thr				
	725	730	735		
55	cca ggg ttg ccc gtc tgc cag gac cat ctg gag ttc tgg gag agc gtc				4057
	Pro Gly Leu Pro Val Cys Gln Asp His Leu Glu Phe Trp Glu Ser Val				
	740	745	750		
	ttt aca ggc ctc acc cac ata gac gcc cat ttc ttg tcc cag act aag				4105
	Phe Thr Gly Leu Thr His Ile Asp Ala His Phe Leu Ser Gln Thr Lys				
	755	760	765		
	cag gca gga gac aac ttc ccc tac ctg gta gca tac cag gct acg gtg				4153
	Gln Ala Gly Asp Asn Phe Pro Tyr Leu Val Ala Tyr Gln Ala Thr Val				
	770	775	780		

	tgc gcc agg gct cag gct cca cct cca tcg tgg gac caa atg tgg aag	4201
	Cys Ala Arg Ala Gln Ala Pro Pro Pro Ser Trp Asp Gln Met Trp Lys	
5	785 790 795 800	
	tgt ctc ata cgg cta aag cct acg ctg cac ggg cca acg ccc ctg ctg	4249
	Cys Leu Ile Arg Leu Lys Pro Thr Leu His Gly Pro Thr Pro Leu Leu	
	805 810 815	
10	tat agg ctg gga gcc gtt caa aac gag gtt act acc aca cac ccc ata	4297
	Tyr Arg Leu Gly Ala Val Gln Asn Glu Val Thr Thr His Pro Ile	
	820 825 830	
15	acc aaa tac atc atg gca tgc atg tcg gct gac ctg gag gtc gtc acg	4345
	Thr Lys Tyr Ile Met Ala Cys Met Ser Ala Asp Leu Glu Val Val Thr	
	835 840 845	
20	agc acc tgg gtg ctg gta ggc gga gtc cta gca gct ctg gcc gcg tat	4393
	Ser Thr Trp Val Leu Val Gly Gly Val Leu Ala Ala Leu Ala Ala Tyr	
	850 855 860	
25	tgc ctg aca aca ggc agc gtg gtc att gtg ggc agg atc atc ttg tcc	4441
	Cys Leu Thr Thr Gly Ser Val Val Ile Val Gly Arg Ile Ile Leu Ser	
	865 870 875 880	
	gga aag ccg gcc atc att ccc gac agg gaa gtc ctt tac cgg gag ttc	4489
	Gly Lys Pro Ala Ile Ile Pro Asp Arg Glu Val Leu Tyr Arg Glu Phe	
	885 890 895	
30	gat gag atg gaa gag tgc gcc tca cac ctc cct tac atc gaa cag gga	4537
	Asp Glu Met Glu Glu Cys Ala Ser His Leu Pro Tyr Ile Glu Gln Gly	
	900 905 910	
35	atg cag ctc gcc gaa caa ttc aaa cag aag gca atc ggg ttg ctg caa	4585
	Met Gln Leu Ala Glu Gln Phe Lys Gln Lys Ala Ile Gly Leu Leu Gln	
	915 920 925	
40	aca gcc acc aag caa gcg gag gct gct ccc gtg gtg gaa tcc aag	4633
	Thr Ala Thr Lys Gln Ala Glu Ala Ala Pro Val Val Glu Ser Lys	
	930 935 940	
45	tgg cgg acc ctc gaa gcc ttc tgg gcg aag cat atg tgg aat ttc atc	4681
	Trp Arg Thr Leu Glu Ala Phe Trp Ala Lys His Met Trp Asn Phe Ile	
	945 950 955 960	
	agc ggg ata caa tat tta gca ggc ttg tcc act ctg cct ggc aac ccc	4729
	Ser Gly Ile Gln Tyr Leu Ala Gly Leu Ser Thr Leu Pro Gly Asn Pro	
	965 970 975	
50	gcg ata gca tca ctg atg gca ttc aca gcc tct atc acc agc ccg ctc	4777
	Ala Ile Ala Ser Leu Met Ala Phe Thr Ala Ser Ile Thr Ser Pro Leu	
	980 985 990	
55	acc acc caa cat acc ctc ctg ttt aac atc ctg ggg gga tgg gtg gcc	4825
	Thr Thr Gln His Thr Leu Leu Phe Asn Ile Leu Gly Gly Trp Val Ala	
	995 1000 1005	

	gcc caa ctt gct cct ccc agc gct gct tct gct ttc gta ggc gcc ggc	4873
	Ala Gln Leu Ala Pro Pro Ser Ala Ala Ser Ala Phe Val Gly Ala Gly	
	1010 1015 1020	
5	atc gct gga gcg gct gtt ggc agc ata ggc ctt ggg aag gtg ctt gtg	4921
	Ile Ala Gly Ala Ala Val Gly Ser Ile Gly Leu Gly Lys Val Leu Val	
	1025 1030 1035 1040	
10	gat att ttg gca ggt tat gga gca ggg gtg gca ggc gcg ctc gtg gcc	4969
	Asp Ile Leu Ala Gly Tyr Gly Ala Gly Val Ala Gly Ala Leu Val Ala	
	1045 1050 1055	
15	ttt aag gtc atg agc ggc gag atg ccc tcc acc gag gac ctg gtt aac	5017
	Phe Lys Val Met Ser Gly Glu Met Pro Ser Thr Glu Asp Leu Val Asn	
	1060 1065 1070	
20	cta ctc cct gct atc ctc tcc cct ggc gcc cta gtc gtc ggg gtc gtg	5065
	Leu Leu Pro Ala Ile Leu Ser Pro Gly Ala Leu Val Val Gly Val Val	
	1075 1080 1085	
	tgc gca gcg ata ctg cgt cgg cac gtg ggc cca ggg gag ggg gct gtg	5113
	Cys Ala Ala Ile Leu Arg Arg His Val Gly Pro Gly Glu Gly Ala Val	
	1090 1095 1100	
25	cag tgg atg aac cgg ctg ata gcg ttc gct tcg cgg ggt aac cac gtc	5161
	Gln Trp Met Asn Arg Leu Ile Ala Phe Ala Ser Arg Gly Asn His Val	
	1105 1110 1115 1120	
30	tcc ccc acg cac tat gtg cct gag agc gac gct gca gca cgt gtc act	5209
	Ser Pro Thr His Tyr Val Pro Glu Ser Asp Ala Ala Arg Val Thr	
	1125 1130 1135	
35	cag atc ctc tct agt ctt acc atc act cag ctg ctg aag agg ctt cac	5257
	Gln Ile Leu Ser Ser Leu Thr Ile Thr Gln Leu Leu Lys Arg Leu His	
	1140 1145 1150	
	cag tgg atc aac gag gac tgc tcc acg cca tgc tcc ggc tcg tgg cta	5305
	Gln Trp Ile Asn Glu Asp Cys Ser Thr Pro Cys Ser Gly Ser Trp Leu	
	1155 1160 1165	
40	aga gat gtt tgg gat tgg ata tgc acg gtg ttg act gat ttc aag acc	5353
	Arg Asp Val Trp Asp Trp Ile Cys Thr Val Leu Thr Asp Phe Lys Thr	
	1170 1175 1180	
45	tgg ctc cag tcc aag ctc ctg ccg cga ttg ccg gga gtc ccc ttc ttc	5401
	Trp Leu Gln Ser Lys Leu Leu Pro Arg Leu Pro Gly Val Pro Phe Phe	
	1185 1190 1195 1200	
50	tca tgt caa cgt ggg tac aag gga gtc tgg ccg ggc gac ggc atc atg	5449
	Ser Cys Gln Arg Gly Tyr Lys Gly Val Trp Arg Gly Asp Gly Ile Met	
	1205 1210 1215	
55	caa acc acc tgc cca tgt gga gca cag atc acc gga cat gtg aaa aac	5497
	Gln Thr Thr Cys Pro Cys Gly Ala Gln Ile Thr Gly His Val Lys Asn	
	1220 1225 1230	
	ggt tcc atg agg atc gtg ggg cct agg acc tgt agt aac acg tgg cat	5545

	Gly Ser Met Arg Ile Val Gly Pro Arg Thr Cys Ser Asn Thr Trp His			
	1235	1240	1245	
5	gga aca ttc ccc att aac gcg tac acc acg ggc ccc tgc acg ccc tcc		5593	
	Gly Thr Phe Pro Ile Asn Ala Tyr Thr Thr Gly Pro Cys Thr Pro Ser			
	1250	1255	1260	
10	ccg gcg cca aat tat tct agg gcg ctg tgg cgg gtg gct gct gag gag		5641	
	Pro Ala Pro Asn Tyr Ser Arg Ala Leu Trp Arg Val Ala Ala Glu Glu			
	1265	1270	1275	1280
15	tac gtg gag gtt acg cgg gtg ggg gat ttc cac tac gtg acg ggc atg		5689	
	Tyr Val Glu Val Thr Arg Val Gly Asp Phe His Tyr Val Thr Gly Met			
	1285	1290	1295	
20	acc act gac aac gta aag tgc ccg tgt cag gtt ccg gcc ccc gaa ttc		5737	
	Thr Thr Asp Asn Val Lys Cys Pro Cys Gln Val Pro Ala Pro Glu Phe			
	1300	1305	1310	
25	ttc aca gaa gtg gat ggg gtg cgg ttg cac agg tac gct cca gcg tgc		5785	
	Phe Thr Glu Val Asp Gly Val Arg Leu His Arg Tyr Ala Pro Ala Cys			
	1315	1320	1325	
30	aaa ccc ctc cta cgg gag gag gtc aca ttc ctg gtc ggg ctc aat caa		5833	
	Lys Pro Leu Leu Arg Glu Glu Val Thr Phe Leu Val Gly Leu Asn Gln			
	1330	1335	1340	
35	tac ctg gtt ggg tca cag ctc cca tgc gag ccc gaa ccg gac gta gca		5881	
	Tyr Leu Val Gly Ser Gln Leu Pro Cys Glu Pro Glu Pro Asp Val Ala			
	1345	1350	1355	1360
40	gtg ctc act tcc atg ctc acc gac ccc tcc cac att acg gcg gag acg		5929	
	Val Leu Thr Ser Met Leu Thr Asp Pro Ser His Ile Thr Ala Glu Thr			
	1365	1370	1375	
45	gct aag cgt agg ctg gcc agg gga tct ccc ccc tcc ttg gcc agc tca		5977	
	Ala Lys Arg Arg Leu Ala Arg Gly Ser Pro Pro Ser Leu Ala Ser Ser			
	1380	1385	1390	
50	tca gct agc cag ctg tct gcg cct tcc ttg aag gca aca tgc act acc		6025	
	Ser Ala Ser Gln Leu Ser Ala Pro Ser Leu Lys Ala Thr Cys Thr Thr			
	1395	1400	1405	
55	cgt cat gac tcc ccg gac gct gac ctc atc gag gcc aac ctc ctg tgg		6073	
	Arg His Asp Ser Pro Asp Ala Asp Leu Ile Glu Ala Asn Leu Leu Trp			
	1410	1415	1420	
60	cgg cag gag atg ggc ggg aac atc acc cgc gtg gag tca gaa aat aag		6121	
	Arg Gln Glu Met Gly Gly Asn Ile Thr Arg Val Glu Ser Glu Asn Lys			
	1425	1430	1435	1440
65	gta gta att ttg gac tct ttc gag ccg ctc caa gcg gag gag gat gag		6169	
	Val Val Ile Leu Asp Ser Phe Glu Pro Leu Gln Ala Glu Glu Asp Glu			
	1445	1450	1455	
70	agg gaa gta tcc gtt ccg gcg gag atc ctg cgg agg tcc agg aaa ttc		6217	
	Arg Glu Val Ser Val Pro Ala Glu Ile Leu Arg Arg Ser Arg Lys Phe			

	1460	1465	1470	
5	cct cga gcg atg ccc ata tgg gca cgc ccg gat tac aac cct cca ctg Pro Arg Ala Met Pro Ile Trp Ala Arg Pro Asp Tyr Asn Pro Pro Leu 1475 1480 1485			6265
10	tta gag tcc tgg aag gac ccg gac tac gtc cct cca gtg gta cac ggg Leu Glu Ser Trp Lys Asp Pro Asp Tyr Val Pro Pro Val Val His Gly 1490 1495 1500			6313
15	tgt cca ttg ccg cct gcc aag gcc cct ccg ata cca cct cca cgg agg Cys Pro Leu Pro Pro Ala Lys Ala Pro Pro Ile Pro Pro Pro Arg Arg 1505 1510 1515 1520			6361
20	aag agg acg gtt gtc ctg tca gaa tct acc gtg tct tct gcc ttg gcg Lys Arg Thr Val Val Leu Ser Glu Ser Thr Val Ser Ser Ala Leu Ala 1525 1530 1535			6409
25	gag ctc gcc aca aag acc ttc ggc agc tcc gaa tcg tcg gcc gtc gac Glu Leu Ala Thr Lys Thr Phe Gly Ser Ser Glu Ser Ser Ala Val Asp 1540 1545 1550			6457
30	agc ggc acg gca acg gcc tct cct gac cag ccc tcc gac gac ggc gac Ser Gly Thr Ala Thr Ala Ser Pro Asp Gln Pro Ser Asp Asp Gly Asp 1555 1560 1565			6505
35	gcg gga tcc gac gtt gag tcg tac tcc tcc atg ccc ccc ctt gag ggg Ala Gly Ser Asp Val Glu Ser Tyr Ser Ser Met Pro Pro Leu Glu Gly 1570 1575 1580			6553
40	gag ccg ggg gat ccc gat ctc agc gac ggg tct tgg tct acc gta agc Glu Pro Gly Asp Pro Asp Leu Ser Asp Gly Ser Trp Ser Thr Val Ser 1585 1590 1595 1600			6601
45	gag gag gct agt gag gac gtc gtc tgc tcg atg tcc tac aca tgg Glu Glu Ala Ser Glu Asp Val Val Cys Cys Ser Met Ser Tyr Thr Trp 1605 1610 1615			6649
50	aca ggc gcc ctg atc acg cca tgc gct gcg gag gaa acc aac ctg ccc Thr Gly Ala Leu Ile Thr Pro Cys Ala Ala Glu Glu Thr Lys Leu Pro 1620 1625 1630			6697
55	atc aat gca ctg agc aac tct ttg ctc cgt cac cac aac ttg gtc tat Ile Asn Ala Leu Ser Asn Ser Leu Leu Arg His His Asn Leu Val Tyr 1635 1640 1645			6745
60	gct aca aca tct cgc agc gca agc ctg cgg cag aag aag gtc acc ttt Ala Thr Thr Ser Arg Ser Ala Ser Leu Arg Gln Lys Lys Val Thr Phe 1650 1655 1660			6793
65	gac aga ctg cag gtc ctg gac gac cac tac cgg gac gtg ctc aag gag Asp Arg Leu Gln Val Leu Asp Asp His Tyr Arg Asp Val Leu Lys Glu 1665 1670 1675 1680			6841
70	atg aag gcg aag gcg tcc aca gtt aag gct aaa ctt cta tcc gtg gag Met Lys Ala Lys Ala Ser Thr Val Lys Ala Lys Leu Leu Ser Val Glu 1685 1690 1695			6889

	gaa gcc tgt aag ctg acg ccc cca cat tcg gcc aga tct aaa ttt ggc	6937
	Glu Ala Cys Lys Leu Thr Pro Pro His Ser Ala Arg Ser Lys Phe Gly	
	1700 1705 1710	
5		
	tat ggg gca aag gac gtc cg ^g aac cta tcc agc aag gcc gtt aac cac	6985
	Tyr Gly Ala Lys Asp Val Arg Asn Leu Ser Ser Lys Ala Val Asn His	
	1715 1720 1725	
10	atc cgc tcc gtg tgg aag gac ttg ctg gaa gac act gag aca cca att	7033
	Ile Arg Ser Val Trp Lys Asp Leu Leu Glu Asp Thr Glu Thr Pro Ile	
	1730 1735 1740	
15	gac acc acc atc atg gca aaa aat gag gtt ttc tgc gtc caa cca gag	7081
	Asp Thr Thr Ile Met Ala Lys Asn Glu Val Phe Cys Val Gln Pro Glu	
	1745 1750 1755 1760	
20	aag ggg ggc cgc aag cca gct cgc ctt atc gta ttc cca gat ttg ggg	7129
	Lys Gly Gly Arg Lys Pro Ala Arg Leu Ile Val Phe Pro Asp Leu Gly	
	1765 1770 1775	
	gtt cgt gtg tgc gag aaa atg gcc ctt tac gat gtg gtc tcc acc ctc	7177
	Val Arg Val Cys Glu Lys Met Ala Leu Tyr Asp Val Val Ser Thr Leu	
	1780 1785 1790	
25	cct cag gcc gtg atg ggc tct tca tac gga ttc caa tac tct cct gga	7225
	Pro Gln Ala Val Met Gly Ser Ser Tyr Gly Phe Gln Tyr Ser Pro Gly	
	1795 1800 1805	
30	cag cgg gtc gag ttc ctg gtg aat gcc tgg aaa gc ^g aag aaa tgc cct	7273
	Gln Arg Val Glu Phe Leu Val Asn Ala Trp Lys Ala Lys Lys Cys Pro	
	1810 1815 1820	
35	atg ggc ttc gca tat gac acc cgc tgt ttt gac tca acg gtc act gag	7321
	Met Gly Phe Ala Tyr Asp Thr Arg Cys Phe Asp Ser Thr Val Thr Glu	
	1825 1830 1835 1840	
40	aat gac atc cgt gtt gag gag tca atc tac caa tgt tgt gac ttg gcc	7369
	Asn Asp Ile Arg Val Glu Glu Ser Ile Tyr Gln Cys Cys Asp Leu Ala	
	1845 1850 1855	
	ccc gaa gcc aga cag gcc ata agg tcg ctc aca gag cgg ctt tac atc	7417
	Pro Glu Ala Arg Gln Ala Ile Arg Ser Leu Thr Glu Arg Leu Tyr Ile	
	1860 1865 1870	
45	ggg ggc ccc ctg act aat tct aaa ggg cag aac tgc ggc tat cgc cgg	7465
	Gly Gly Pro Leu Thr Asn Ser Lys Gly Gln Asn Cys Gly Tyr Arg Arg	
	1875 1880 1885	
50	tgc cgc gcg agc ggt gta ctg acg acc agc tgc ggt aat acc ctc aca	7513
	Cys Arg Ala Ser Gly Val Leu Thr Thr Ser Cys Gly Asn Thr Leu Thr	
	1890 1895 1900	
55	tgt tac ttg aag gcc gct gcg gcc tgt cga gct gcg aag ctc cag gac	7561
	Cys Tyr Leu Lys Ala Ala Ala Cys Arg Ala Ala Lys Leu Gln Asp	
	1905 1910 1915 1920	

	tgc acg atg ctc gta tgc gga gac gac ctt gtc gtt atc tgt gaa agc Cys Thr Met Leu Val Cys Gly Asp Asp Leu Val Val Ile Cys Glu Ser 1925 1930 1935	7609
5	gcg ggg acc caa gag gac gag gcg agc cta cggttcc acg gag gct Ala Gly Thr Gln Glu Asp Ala Ser Leu Arg Ala Phe Thr Glu Ala 1940 1945 1950	7657
10	atg act aga tac tct gcc ccc cct ggg gac ccg ccc aaa cca gaa tac Met Thr Arg Tyr Ser Ala Pro Pro Gly Asp Pro Pro Lys Pro Glu Tyr 1955 1960 1965	7705
15	gac ttg gag ttg ata aca tca tgc tcc tcc aat gtg tca gtc gcg cac Asp Leu Glu Leu Ile Thr Ser Cys Ser Ser Asn Val Ser Val Ala His 1970 1975 1980	7753
20	gat gca tct ggc aaa agg gtg tac tat ctc acc cgt gac ccc acc acc Asp Ala Ser Gly Lys Arg Val Tyr Tyr Leu Thr Arg Asp Pro Thr Thr 1985 1990 1995 2000	7801
25	ccc ctt gcg cggttcc gct gca gag aca cac act cca gtc aat Pro Leu Ala Arg Ala Ala Trp Glu Thr Ala Arg His Thr Pro Val Asn 2005 2010 2015	7849
30	tcc tgg cta ggc aac atc atc atg tat gcg ccc acc ttg tgg gca agg Ser Trp Leu Gly Asn Ile Ile Met Tyr Ala Pro Thr Leu Trp Ala Arg 2020 2025 2030	7897
35	atg atc ctg atg act cat ttc ttc tcc atc ctt cta gct cag gaa caa Met Ile Leu Met Thr His Phe Phe Ser Ile Leu Leu Ala Gln Glu Gln 2035 2040 2045	7945
40	ctt gaa aaa gcc cta gat tgt cag atc tac ggg gcc tgt tac tcc att Leu Glu Lys Ala Leu Asp Cys Gln Ile Tyr Gly Ala Cys Tyr Ser Ile 2050 2055 2060	7993
45	gag cca ctt gac cta cct cag atc att caa cga ctc cac ggc ctt agc Glu Pro Leu Asp Leu Pro Gln Ile Ile Gln Arg Leu His Gly Leu Ser 2065 2070 2075 2080	8041
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	cggttcc gac agt gtc cgc gct agg cta ctg tcc cag ggg ggg agg gct Arg Ala Arg Ser Val Arg Ala Arg Leu Leu Ser Gln Gly Arg Ala 2115 2120 2125	8185
	gcc act tgt ggc aag tac ctc ttc aac tgg gca gta agg acc aag ctc Ala Thr Cys Gly Lys Tyr Leu Phe Asn Trp Ala Val Arg Thr Lys Leu 2130 2135 2140	8233
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	580 585 590	
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	965	970	975
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	980	985	990
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	995	1000	1005
35	gcc caa ctt gct cct ccc agc gct gct tcc gct ttc gta ggc gcc ggc Ala Gln Leu Ala Pro Pro Ser Ala Ala Ser Ala Phe Val Gly Ala Gly		4873
	1010	1015	1020
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	1025	1030	1035
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	1120		
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	Glu Leu Ala Thr Lys Thr Phe Gly Ser Ser Glu Ser Ser Ala Val Asp	
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	Ser Gly Thr Ala Thr Ala Ser Pro Asp Gln Pro Ser Asp Asp Gly Asp	
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	Ala Gly Ser Asp Val Glu Ser Tyr Ser Ser Met Pro Pro Leu Glu Gly	
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	Thr Gly Ala Leu Ile Thr Pro Cys Ala Ala Glu Glu Thr Lys Leu Pro		
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	Ala Thr Thr Ser Arg Ser Ala Ser Leu Arg Gln Lys Lys Val Thr Phe		
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	gac aga ctg cag gtc ctg gac gac cac tac cgg gac gtg ctc aag gag	6841	
	Asp Arg Leu Gln Val Leu Asp Asp His Tyr Arg Asp Val Leu Lys Glu		
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	Met Lys Ala Lys Ala Ser Thr Val Lys Ala Lys Leu Leu Ser Val Glu		
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	Glu Ala Cys Lys Leu Thr Pro Pro His Ser Ala Arg Ser Lys Phe Gly		
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	Tyr Gly Ala Lys Asp Val Arg Asn Leu Ser Ser Lys Ala Val Asn His		
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	Ile Arg Ser Val Trp Lys Asp Leu Leu Glu Asp Thr Glu Thr Pro Ile		
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	Val Arg Val Cys Glu Lys Met Ala Leu Tyr Asp Val Val Ser Thr Leu		
	1780	1785	1790
55	cct cag gcc gtg atg ggc tct tca tac gga ttc caa tac tct cct gga	7225	
	Pro Gln Ala Val Met Gly Ser Ser Tyr Gly Phe Gln Tyr Ser Pro Gly		
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	cag cgg gtc gag ttc ctg gtg aat gcc tgg aaa gcg aag aaa tgc cct	7273	

	Gln Arg Val Glu Phe Leu Val Asn Ala Trp Lys Ala Lys Lys Cys Pro			
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5	atg ggc ttc gca tat gac acc cgc tgt ttt gac tca acg gtc act gag Met Gly Phe Ala Tyr Asp Thr Arg Cys Phe Asp Ser Thr Val Thr Glu			7321
	1825	1830	1835	1840
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	1845	1850	1855	
15	ccc gaa gcc aga cag gcc ata agg tcg ctc aca gag cgg ctt tac atc Pro Glu Ala Arg Gln Ala Ile Arg Ser Leu Thr Glu Arg Leu Tyr Ile			7417
	1860	1865	1870	
20	ggg ggc ccc ctg act aat tct aaa ggg cag aac tgc ggc tat cgc cgg Gly Gly Pro Leu Thr Asn Ser Lys Gly Gln Asn Cys Gly Tyr Arg Arg			7465
	1875	1880	1885	
25	tgc cgc gcg agc ggt gta ctg acg acc agc tgc ggt aat acc ctc aca Cys Arg Ala Ser Gly Val Leu Thr Thr Ser Cys Gly Asn Thr Leu Thr			7513
	1890	1895	1900	
30	tgt tac ttg aag gcc gct gcg gcc tgt cga gct gcg aag ctc cag gac Cys Tyr Leu Lys Ala Ala Ala Cys Arg Ala Ala Lys Leu Gln Asp			7561
	1905	1910	1915	1920
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	1925	1930	1935	
40	gcg ggg acc caa gag gac gag gcg agc cta cgg gcc ttc acg gag gct Ala Gly Thr Gln Glu Asp Glu Ala Ser Leu Arg Ala Phe Thr Glu Ala			7657
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	1970	1975	1980	
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	1985	1990	1995	2000
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	2005	2010	2015	
65	tcc tgg cta ggc aac atc atc atg tat gcg ccc acc ttg tgg gca agg Ser Trp Leu Gly Asn Ile Ile Met Tyr Ala Pro Thr Leu Trp Ala Arg			7897
	2020	2025	2030	
70	atg atc ctg atg act cat ttc ttc atc ctt cta gct cag gaa caa Met Ile Leu Met Thr His Phe Phe Ser Ile Leu Ala Gln Glu Gln			7945

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5	ctt gaa aaa gcc cta gat tgt cag atc tac ggg gcc tgt tac tcc att Leu Glu Lys Ala Leu Asp Cys Gln Ile Tyr Gly Ala Cys Tyr Ser Ile 2050	2055	2060	7993
10	gag cca ctt gac cta cct cag atc att caa cga ctc cac ggc ctt agc Glu Pro Leu Asp Leu Pro Gln Ile Ile Gln Arg Leu His Gly Leu Ser 2065	2070	2075	8041
15	gca ttt tca ctc cat agt tac tct cca ggt gag atc aat agg gtg gct Ala Phe Ser Leu His Ser Tyr Ser Pro Gly Glu Ile Asn Arg Val Ala 2085	2090	2095	8089
20	tca tgc ctc agg aaa ctt ggg gta ccg ccc ttg cga gtc tgg aga cat Ser Cys Leu Arg Lys Leu Gly Val Pro Pro Leu Arg Val Trp Arg His 2100	2105	2110	8137
25	cgg gcc aga agt gtc cgc gct agg cta ctg tcc cag ggg ggg agg gct Arg Ala Arg Ser Val Arg Ala Arg Leu Leu Ser Gln Gly Gly Arg Ala 2115	2120	2125	8185
30	gcc act tgt ggc aag tac ctc ttc aac tgg gca gta agg acc aag ctc Ala Thr Cys Gly Lys Tyr Leu Phe Asn Trp Ala Val Arg Thr Lys Leu 2130	2135	2140	8233
35	aaa ctc act cca atc ccg gct gcg tcc cag ttg gat tta tcc agc tgg Lys Leu Thr Pro Ile Pro Ala Ala Ser Gln Leu Asp Leu Ser Ser Trp 2145	2150	2155	8281
40	ttc gtt gct ggt tac agc ggg gga gac ata tat cac agc ctg tct cgt Phe Val Ala Gly Tyr Ser Gly Gly Asp Ile Tyr His Ser Leu Ser Arg 2165	2170	2175	8329
45	gcc cga ccc cgc tgg ttc atg tgg tgc cta ctc cta ctt tct gta ggg Ala Arg Pro Arg Trp Phe Met Trp Cys Leu Leu Leu Ser Val Gly 2180	2185	2190	8377
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	Met Ser Thr Asn Pro					
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	Glu Arg Ser Gln Pro Arg Gly Arg Arg Gln Pro Ile Pro Lys Ala Arg					
	55 60 65					

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	Tyr Gly Asn Glu Gly Leu Gly Trp Ala Gly Trp Leu Leu Ser Pro Arg			
	90	95	100	
10	ggc tct cgg cct agt tgg ggc ccc acg gac ccc cgg cgt agg tcg cgc	692		
	Gly Ser Arg Pro Ser Trp Gly Pro Thr Asp Pro Arg Arg Ser Arg			
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	120	125	130	
20	atg ggg tac att ccg ctc gtc ggc gcc ccc cta ggg ggc gct gcc agg	788		
	Met Gly Tyr Ile Pro Leu Val Gly Ala Pro Leu Gly Gly Ala Ala Arg			
	135	140	145	
25	gcc ctg gcg cat ggc gtc cggt gtt ctg gag gac ggc gtg aac tat gca	836		
	Ala Leu Ala His Gly Val Arg Val Leu Glu Asp Gly Val Asn Tyr Ala			
	150	155	160	165
30	aca ggg aat ctg ccc ggt tgc tcc ttt tct atc ttc ctt ttg gct ttg	884		
	Thr Gly Asn Leu Pro Gly Cys Ser Phe Ser Ile Phe Leu Leu Ala Leu			
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	185	190	195	
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	200	205	210	
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	Tyr Glu Ala Ala Asp Met Ile Met His Thr Pro Gly Cys Val Pro Cys			
	215	220	225	
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55	ctc gcg gcc agg aac gct acg gtc ccc act acg acg ata cga cgc cat	1124		
	Leu Ala Ala Arg Asn Ala Ser Val Pro Thr Thr Ile Arg Arg His			
	250	255	260	
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	Val Asp Leu Leu Val Gly Ala Ala Ala Leu Cys Ser Ala Met Tyr Val			
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	Gly Asp Leu Cys Gly Ser Val Phe Leu Val Ala Gln Leu Phe Thr Phe			
	280	285	290	
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	Ser Pro Arg Arg His Glu Thr Val Gln Asp Cys Asn Cys Ser Ile Tyr			
	295	300	305	
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	Pro Gly His Val Thr Gly His Arg Met Ala Trp Asp Met Met Met Asn			
	310	315	320	325
10	tgg tca cct aca gca gcc cta gtg gta tcg cag tta ctc cgg atc cca		1364	
	Trp Ser Pro Thr Ala Ala Leu Val Val Ser Gln Leu Leu Arg Ile Pro			
	330	335	340	
15	caa gct gtc gtg gat atg gtg gcg ggg gcc cat tgg gga gtc cta gcg		1412	
	Gln Ala Val Val Asp Met Val Ala Gly Ala His Trp Gly Val Leu Ala			
	345	350	355	
	ggc ctt gcc tac tat tcc atg gtg ggg aac tgg gct aag gtt ctg att		1460	
	Gly Leu Ala Tyr Tyr Ser Met Val Gly Asn Trp Ala Lys Val Leu Ile			
	360	365	370	
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	Val Met Leu Leu Phe Ala Gly Val Asp Gly Gly Thr Tyr Val Thr Gly			
	375	380	385	
25	ggg acg atg gcc aaa aac acc ctc ggg att acg tcc ctc ttt tca ccc		1556	
	Gly Thr Met Ala Lys Asn Thr Leu Gly Ile Thr Ser Leu Phe Ser Pro			
	390	395	400	405
30	ggg tca tcc cag aaa atc cag ctt gta aac acc aac ggc agc tgg cac		1604	
	Gly Ser Ser Gln Lys Ile Gln Leu Val Asn Thr Asn Gly Ser Trp His			
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	Ile Asn Arg Thr Ala Leu Asn Cys Asn Asp Ser Leu Asn Thr Gly Phe			
	425	430	435	
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	Leu Ala Ala Leu Phe Tyr Val His Lys Phe Asn Ser Ser Gly Cys Pro			
	440	445	450	
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	Glu Arg Met Ala Ser Cys Ser Pro Ile Asp Ala Phe Ala Gln Gly Trp			
	455	460	465	
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	Gly Pro Ile Thr Tyr Asn Glu Ser His Ser Ser Asp Gln Arg Pro Tyr			
	470	475	480	485
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	Cys Trp His Tyr Ala Pro Arg Pro Cys Gly Ile Val Pro Ala Ala Gln			
	490	495	500	
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	Val Cys Gly Pro Val Tyr Cys Phe Thr Pro Ser Pro Val Val Val Gly			
	505	510	515	
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	520	525	530	
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35	ggc tgg caa gcg ccc ccc ggg ggc cgt tcc ttg aca cca tgc acc tgc	3716
	Gly Trp Gln Ala Pro Pro Gly Ala Arg Ser Leu Thr Pro Cys Thr Cys	
	1110 1115 1120 1125	
40	ggc agc tcg gac ctt tac ttg gtc acg agg cat gcc gat gtc att ccg	3764
	Gly Ser Ser Asp Leu Tyr Leu Val Thr Arg His Ala Asp Val Ile Pro	
	1130 1135 1140	
	gtg cgc cgg ggc gac agc agg ggg agc cta ctc tcc ccc agg ccc	3812
	Val Arg Arg Gly Asp Ser Arg Gly Ser Leu Leu Ser Pro Arg Pro	
	1145 1150 1155	
45	gtc tcc tac ttg aag ggc tct tcg ggc ggt cca ctg ctc tgc ccc tcg	3860
	Val Ser Tyr Leu Lys Gly Ser Ser Gly Gly Pro Leu Leu Cys Pro Ser	
	1160 1165 1170	
50	ggg cac gct gtg ggc atc ttt cgg gct gcc gtg tgc acc cga ggg gtt	3908
	Gly His Ala Val Gly Ile Phe Arg Ala Ala Val Cys Thr Arg Gly Val	
	1175 1180 1185	
55	gcg aag gcg gtg gac ttt gta ccc gtc gag tct atg gaa acc act atg	3956
	Ala Lys Ala Val Asp Phe Val Pro Val Glu Ser Met Glu Thr Thr Met	
	1190 1195 1200 1205	
	cgg tcc ccg gtc ttc acg gac aac tcg tcc cct ccg gcc gta ccg cag	4004

	Arg Ser Pro Val Phe Thr Asp Asn Ser Ser Pro Pro Ala Val Pro Gln		
	1210	1215	1220
5	aca ttc cag gtg gcc cat cta cac gcc cct act ggt agc ggc aag agc Thr Phe Gln Val Ala His Leu His Ala Pro Thr Gly Ser Gly Lys Ser		4052
	1225	1230	1235
10	act aag gtg ccg gct gcg tat gca gcc caa ggg tat aag gtg ctt gtc Thr Lys Val Pro Ala Ala Tyr Ala Ala Gln Gly Tyr Lys Val Leu Val		4100
	1240	1245	1250
15	ctg aac ccg tcc gtc gcc acc cta ggt ttc ggg gcg tat atg tct Leu Asn Pro Ser Val Ala Ala Thr Leu Gly Phe Gly Ala Tyr Met Ser		4148
	1255	1260	1265
20	aag gca cat ggt atc gac cct aac atc aga acc ggg gta agg acc atc Lys Ala His Gly Ile Asp Pro Asn Ile Arg Thr Gly Val Arg Thr Ile		4196
	1270	1275	1280
25	acc acg ggt gcc ccc atc acg tac tcc acc tat ggc aag ttt ctt gcc Thr Thr Gly Ala Pro Ile Thr Tyr Ser Thr Tyr Gly Lys Phe Leu Ala		4244
	1290	1295	1300
30	tgc cac tca act gac tcg acc act atc ctg ggc atc ggc aca gtc ctg Cys His Ser Thr Asp Ser Thr Thr Ile Leu Gly Ile Gly Thr Val Leu		4340
	1320	1325	1330
35	gac caa gcg gag acg gct gga gcg cga ctc gtc gtg ctc gcc acc gct Asp Gln Ala Glu Thr Ala Gly Ala Arg Leu Val Val Leu Ala Thr Ala		4388
	1335	1340	1345
40	acg cct ccg gga tcg gtc acc gtg cca cat cca aac atc gag gag gtg Thr Pro Pro Gly Ser Val Thr Val Pro His Pro Asn Ile Glu Glu Val		4436
	1350	1355	1360
45	1365		
	gct ctg tcc agc act gga gaa atc ccc ttt tat ggc aaa gcc atc ccc Ala Leu Ser Ser Thr Gly Glu Ile Pro Phe Tyr Gly Lys Ala Ile Pro		4484
	1370	1375	1380
50	atc gag acc atc aag ggg ggg agg cac ctc att ttc tgc cat tcc aag Ile Glu Thr Ile Lys Gly Arg His Leu Ile Phe Cys His Ser Lys		4532
	1385	1390	1395
55	aag aaa tgt gat gag ctc gcc gcg aag ctg tcc ggc ctc gga ctc aat Lys Lys Cys Asp Glu Leu Ala Ala Lys Leu Ser Gly Leu Gly Leu Asn		4580
	1400	1405	1410
	gct gta gca tat tac cgg ggc ctt gat gta tcc gtc ata cca act agc Ala Val Ala Tyr Tyr Arg Gly Leu Asp Val Ser Val Ile Pro Thr Ser		4628
	1415	1420	1425
	gga gac gtc att gtc gta gca acg gac gct cta atg acg ggc ttt acc Gly Asp Val Ile Val Val Ala Thr Asp Ala Leu Met Thr Gly Phe Thr		4676

	1430	1435	1440	1445		
	ggc gat ttc gac tca gtg atc gac tgc aat aca tgt gtc acc cag aca				4724	
5	Gly	Asp	Phe	Asp	Ser Val Ile Asp Cys Asn Thr Cys Val Thr Gln Thr	
	1450		1455		1460	
	gtc gac ttc agc ctg gac ccg acc ttc acc att gag acg acg acc gtg				4772	
	Val	Asp	Phe	Ser	Leu Asp Pro Thr Phe Thr Ile Glu Thr Thr Val	
10	1465		1470		1475	
	cca caa gac gcg gtg tca cgc tcg cag ccg cga ggc agg act ggt agg				4820	
	Pro	Gln	Asp	Ala	Val Ser Arg Ser Gln Arg Arg Gly Arg Thr Gly Arg	
	1480		1485		1490	
15	ggc agg atg ggc att tac agg ttt gtg act cca gga gaa ccg ccc tcg				4868	
	Gly	Arg	Met	Gly	Ile Tyr Arg Phe Val Thr Pro Gly Glu Arg Pro Ser	
	1495		1500		1505	
20	ggc atg ttc gat tcc tcg gtt ctg tgc gag tgc tat gac gcg ggc tgt				4916	
	Gly	Met	Phe	Asp	Ser Ser Val Leu Cys Glu Cys Tyr Asp Ala Gly Cys	
	1510		1515		1520	1525
25	gct tgg tac gag ctc acg ccc gcc gag acc tca gtt agg ttg ccg gct				4964	
	Ala	Trp	Tyr	Glu	Leu Thr Pro Ala Glu Thr Ser Val Arg Leu Arg Ala	
	1530		1535		1540	
30	tac cta aac aca cca ggg ttg ccc gtc tgc cag gac cat ctg gag ttc				5012	
	Tyr	Leu	Asn	Thr	Pro Gly Leu Pro Val Cys Gln Asp His Leu Glu Phe	
	1545		1550		1555	
35	tgg gag agc gtc ttt aca ggc ctc acc cac ata gac gcc cat ttc ttg				5060	
	Trp	Glu	Ser	Val	Phe Thr Gly Leu Thr His Ile Asp Ala His Phe Leu	
	1560		1565		1570	
40	tcc cag act aag cag gca gga gac aac ttc ccc tac ctg gta gca tac				5108	
	Ser	Gln	Thr	Lys	Gln Ala Gly Asp Asn Phe Pro Tyr Leu Val Ala Tyr	
	1575		1580		1585	
45	cag gct acg gtg tgc gcc agg gct cag gct cca cct cca tcg tgg gac				5156	
	Gln	Ala	Thr	Val	Cys Ala Arg Ala Gln Ala Pro Pro Pro Ser Trp Asp	
	1590		1595		1600	1605
50	caa atg tgg aag tgt ctc ata cgg cta aag cct acg ctg cac ggg cca				5204	
	Gln	Met	Trp	Lys	Cys Leu Ile Arg Leu Lys Pro Thr Leu His Gly Pro	
	1610		1615		1620	
55	acg ccc ctg ctg tat agg ctg gga gcc gtt caa aac gag gtt act acc				5252	
	Thr	Pro	Leu	Leu	Tyr Arg Leu Gly Ala Val Gln Asn Glu Val Thr Thr	
	1625		1630		1635	
	aca cac ccc ata acc aaa tac atc atg gca tgc atg tcg gct gac ctg				5300	
	Thr	His	Pro	Ile	Ser Lys Tyr Ile Met Ala Cys Met Ser Ala Asp Leu	
	1640		1645		1650	
	gag gtc gtc acg agc acc tgg gtg ctg gta ggc gga gtc cta gca gct				5348	
	Glu	Val	Val	Thr	Ser Thr Trp Val Leu Val Gly Gly Val Leu Ala Ala	
	1655		1660		1665	

	ctg gcc gcg tat tgc ctg aca aca ggc agc gtg gtc att gtg ggc agg	5396
	Leu Ala Ala Tyr Cys Leu Thr Thr Gly Ser Val Val Ile Val Gly Arg	
	1670 1675 1680 1685	
5	atc atc ttg tcc gga aag ccg gcc atc att ccc gac agg gaa gtc ctt	5444
	Ile Ile Leu Ser Gly Lys Pro Ala Ile Ile Pro Asp Arg Glu Val Leu	
	1690 1695 1700	
10	tac cgg gag ttc gat gag atg gaa gag tgc gcc tca cac ctc cct tac	5492
	Tyr Arg Glu Phe Asp Glu Met Glu Cys Ala Ser His Leu Pro Tyr	
	1705 1710 1715	
15	atc gaa cag gga atg cag ctc gcc gaa caa ttc aaa cag aag gca atc	5540
	Ile Glu Gln Gly Met Gln Leu Ala Glu Gln Phe Lys Gln Lys Ala Ile	
	1720 1725 1730	
20	ggg ttg ctg caa aca gcc acc aag caa gcg gag gct gct gct ccc gtg	5588
	Gly Leu Leu Gln Thr Ala Thr Lys Gln Ala Glu Ala Ala Ala Pro Val	
	1735 1740 1745	
25	gtg gaa tcc aag tgg cgg acc ctc gaa gcc ttc tgg gcg aag cat atg	5636
	Val Glu Ser Lys Trp Arg Thr Leu Glu Ala Phe Trp Ala Lys His Met	
	1750 1755 1760 1765	
	tgg aat ttc atc agc ggg ata caa tat tta gca ggc ttg tcc act ctg	5684
	Trp Asn Phe Ile Ser Gly Ile Gln Tyr Leu Ala Gly Leu Ser Thr Leu	
	1770 1775 1780	
30	cct ggc aac ccc gcg ata gca tca ctg atg gca ttc aca gcc tct atc	5732
	Pro Gly Asn Pro Ala Ile Ala Ser Leu Met Ala Phe Thr Ala Ser Ile	
	1785 1790 1795	
35	acc agc ccg ctc acc acc caa cat acc ctc ctg ttt aac atc ctg ggg	5780
	Thr Ser Pro Leu Thr Thr Gln His Thr Leu Leu Phe Asn Ile Leu Gly	
	1800 1805 1810	
40	gga tgg gtg gcc gca ctt gct cct ccc agc gct gct tct gct ttc	5828
	Gly Trp Val Ala Ala Gln Leu Ala Pro Pro Ser Ala Ala Ser Ala Phe	
	1815 1820 1825	
45	gta ggc gcc ggc atc gct gga gcg gct gtt ggc agc ata ggc ctt ggg	5876
	Val Gly Ala Gly Ile Ala Gly Ala Ala Val Gly Ser Ile Gly Leu Gly	
	1830 1835 1840 1845	
	aag gtg ctt gtg gat att ttg gca ggt tat gga gca ggg gtg gca ggc	5924
	Lys Val Leu Val Asp Ile Leu Ala Gly Tyr Gly Ala Gly Val Ala Gly	
	1850 1855 1860	
50	gcg ctc gtg gcc ttt aag gtc atg agc ggc gag atg ccc tcc acc gag	5972
	Ala Leu Val Ala Phe Lys Val Met Ser Gly Glu Met Pro Ser Thr Glu	
	1865 1870 1875	
55	gac ctg gtt aac cta ctc cct gct atc ctc tcc cct ggc gcc cta gtc	6020
	Asp Leu Val Asn Leu Leu Pro Ala Ile Leu Ser Pro Gly Ala Leu Val	
	1880 1885 1890	

	gtc ggg gtc gtg tgc gca gcg ata ctg cgt cgg cac gtg ggc cca ggg	6068
	Val Gly Val Val Cys Ala Ala Ile Leu Arg Arg His Val Gly Pro Gly	
	1895 1900 1905	
5	gag ggg gct gtg cag tgg atg aac cgg ctg ata gcg ttc gct tcg cgg	6116
	Glu Gly Ala Val Gln Trp Met Asn Arg Leu Ile Ala Phe Ala Ser Arg	
	1910 1915 1920 1925	
10	ggt aac cac gtc tcc ccc acg cac tat gtg cct gag agc gac gct gca	6164
	Gly Asn His Val Ser Pro Thr His Tyr Val Pro Glu Ser Asp Ala Ala	
	1930 1935 1940	
15	gca cgt gtc act cag atc ctc tct agt ctt acc atc act cag ctg ctg	6212
	Ala Arg Val Thr Gln Ile Leu Ser Ser Leu Thr Ile Thr Gln Leu Leu	
	1945 1950 1955	
20	aag agg ctt cac cag tgg atc aac gag gac tgc tcc acg cca tgc tcc	6260
	Lys Arg Leu His Gln Trp Ile Asn Glu Asp Cys Ser Thr Pro Cys Ser	
	1960 1965 1970	
	ggc tcg tgg cta aga gat gtt tgg gat tgg ata tgc acg gtg ttg act	6308
	Gly Ser Trp Leu Arg Asp Val Trp Asp Trp Ile Cys Thr Val Leu Thr	
	1975 1980 1985	
25	gat ttc aag acc tgg ctc cag tcc aag ctc ctg ccg cga ttg ccg gga	6356
	Asp Phe Lys Thr Trp Leu Gln Ser Lys Leu Pro Arg Leu Pro Gly	
	1990 1995 2000 2005	
30	gtc ccc ttc ttc tca tgt caa cgt ggg tac aag gga gtc tgg cgg ggc	6404
	Val Pro Phe Phe Ser Cys Gln Arg Gly Tyr Lys Gly Val Trp Arg Gly	
	2010 2015 2020	
35	gac ggc atc atg caa acc acc tgc cca tgt gga gca cag atc acc gga	6452
	Asp Gly Ile Met Gln Thr Thr Cys Pro Cys Gly Ala Gln Ile Thr Gly	
	2025 2030 2035	
40	cat gtg aaa aac ggt tcc atg agg atc gtg ggg cct agg acc tgt agt	6500
	His Val Lys Asn Gly Ser Met Arg Ile Val Gly Pro Arg Thr Cys Ser	
	2040 2045 2050	
	aac acg tgg cat gga aca ttc ccc att aac gcg tac acc acg ggc ccc	6548
	Asn Thr Trp His Gly Thr Phe Pro Ile Asn Ala Tyr Thr Gly Pro	
	2055 2060 2065	
45	tgc acg ccc tcc ccg gcg cca aat tat tct agg gcg ctg tgg cgg gtg	6596
	Cys Thr Pro Ser Pro Ala Pro Asn Tyr Ser Arg Ala Leu Trp Arg Val	
	2070 2075 2080 2085	
50	gct gct gag gag tac gtg gag gtt acg cgg gtg ggg gat ttc cac tac	6644
	Ala Ala Glu Glu Tyr Val Glu Val Thr Arg Val Gly Asp Phe His Tyr	
	2090 2095 2100	
55	gtg acg ggc atg acc act gac aac gta aag tgc ccg tgt cag gtt ccg	6692
	Val Thr Gly Met Thr Thr Asp Asn Val Lys Cys Pro Cys Gln Val Pro	
	2105 2110 2115	
	gcc ccc gaa ttc ttc aca gaa gtg gat ggg gtg cgg ttg cac agg tac	6740

	Ala Pro Glu Phe Thr Glu Val Asp Gly Val Arg Leu His Arg Tyr			
	2120	2125	2130	
5	gct cca gcg tgc aaa ccc ctc cta cg ^g gag g ^g gtc aca ttc ctg gtc		6788	
	Ala Pro Ala Cys Lys Pro Leu Leu Arg Glu Glu Val Thr Phe Leu Val			
	2135	2140	2145	
10	ggg ctc aat caa tac ctg gtt ggg tca cag ctc cca tgc gag ccc gaa		6836	
	Gly Leu Asn Gln Tyr Leu Val Gly Ser Gln Leu Pro Cys Glu Pro Glu			
	2150	2155	2160	2165
15	ccg gac gta gca gtg ctc act tcc atg ctc acc gac ccc tcc cac att		6884	
	Pro Asp Val Ala Val Leu Thr Ser Met Leu Thr Asp Pro Ser His Ile			
	2170	2175	2180	
20	acg gcg gag acg gct aag cgt agg ctg gcc agg gga tct ccc ccc tcc		6932	
	Thr Ala Glu Thr Ala Lys Arg Arg Leu Ala Arg Gly Ser Pro Pro Ser			
	2185	2190	2195	
25	ttg gcc agc tca tca gct agc cag ctg tct g ^c cct tcc ttg aag gca		6980	
	Leu Ala Ser Ser Ser Ala Ser Gln Leu Ser Ala Pro Ser Leu Lys Ala			
	2200	2205	2210	
30	aca tgc act acc cgt cat gac tcc ccg gac gct gac ctc atc gag gcc		7028	
	Thr Cys Thr Thr Arg His Asp Ser Pro Asp Ala Asp Leu Ile Glu Ala			
	2215	2220	2225	
35	aac ctc ctg tgg ccg cag gag atg ggc ggg aac atc acc cgc gtg gag		7076	
	Asn Leu Leu Trp Arg Gln Glu Met Gly Gly Asn Ile Thr Arg Val Glu			
	2230	2235	2240	2245
40	tca gaa aat aag gta gta att ttg gac tct ttc gag ccg ctc caa g ^c		7124	
	Ser Glu Asn Lys Val Val Ile Leu Asp Ser Phe Glu Pro Leu Gln Ala			
	2250	2255	2260	
45	gag gag gat gag agg gaa gta tcc gtt ccg g ^c gag atc ctg cgg agg		7172	
	Glu Glu Asp Glu Arg Glu Val Ser Val Pro Ala Glu Ile Leu Arg Arg			
	2265	2270	2275	
50	tcc agg aaa ttc cct cga g ^c atg ccc ata tgg gca cgc ccg gat tac		7220	
	Ser Arg Lys Phe Pro Arg Ala Met Pro Ile Trp Ala Arg Pro Asp Tyr			
	2280	2285	2290	
55	aac cct cca ctg tta gag tcc tgg aag gac ccg gac tac gtc cct cca		7268	
	Asn Pro Pro Leu Leu Glu Ser Trp Lys Asp Pro Asp Tyr Val Pro Pro			
	2295	2300	2305	
60	gtg gta cac ggg tgt cca ttg ccg cct gcc aag gcc cct ccg ata cca		7316	
	Val Val His Gly Cys Pro Leu Pro Pro Ala Lys Ala Pro Pro Ile Pro			
	2310	2315	2320	2325
65	cct cca cgg agg aag agg acg gtt gtc ctg tca gaa tct acc gtg tct		7364	
	Pro Pro Arg Arg Lys Arg Thr Val Val Leu Ser Glu Ser Thr Val Ser			
	2330	2335	2340	
70	tct gcc ttg g ^c gag ctc gcc aca aag acc ttc ggc agc tcc gaa tcg		7412	
	Ser Ala Leu Ala Glu Leu Ala Thr Lys Thr Phe Gly Ser Ser Glu Ser			

	2345	2350	2355	
	tcg gcc gtc gac agc ggc acg gca acg gcc tct cct gac cag ccc tcc Ser Ala Val Asp Ser Gly Thr Ala Thr Ala Ser Pro Asp Gln Pro Ser			7460
5	2360	2365	2370	
	gac gac ggc gac gcg gga tcc gac gtt gag tcg tac tcc tcc atg ccc Asp Asp Gly Asp Ala Gly Ser Asp Val Glu Ser Tyr Ser Ser Met Pro			7508
	2375	2380	2385	
10	ccc ctt gag ggg gag ccg ggg gat ccc gat ctc agc gac ggg tct tgg Pro Leu Glu Gly Glu Pro Gly Asp Pro Asp Leu Ser Asp Gly Ser Trp			7556
	2390	2395	2400	2405
15	tct acc gta agc gag gag gct agt gag gac gtc gtc tgc tgc tcg atg Ser Thr Val Ser Glu Glu Ala Ser Glu Asp Val Val Cys Cys Ser Met			7604
	2410	2415	2420	
20	tcc tac aca tgg aca ggc gcc ctg atc acg cca tgc gct gcg gag gaa Ser Tyr Thr Trp Thr Gly Ala Leu Ile Thr Pro Cys Ala Ala Glu Glu			7652
	2425	2430	2435	
25	acc aag ctg ccc atc aat gca ctg agc aac tct ttg ctc cgt cac cac Thr Lys Leu Pro Ile Asn Ala Leu Ser Asn Ser Leu Leu Arg His His			7700
	2440	2445	2450	
30	aac ttg gtc tat gct aca aca tct cgc agc gca agc ctg cgg cag aag Asn Leu Val Tyr Ala Thr Ser Arg Ser Ala Ser Leu Arg Gln Lys			7748
	2455	2460	2465	
35	aag gtc acc ttt gac aga ctg cag gtc ctg gac gac cac tac cgg gac Lys Val Thr Phe Asp Arg Leu Gln Val Leu Asp Asp His Tyr Arg Asp			7796
	2470	2475	2480	2485
40	gtg ctc aag gag atg aag gcg aag gcg tcc aca gtt aag gct aaa ctt Val Leu Lys Glu Met Lys Ala Lys Ala Ser Thr Val Lys Ala Lys Leu			7844
	2490	2495	2500	
45	cta tcc gtg gag gaa gcc tgt aag ctg acg ccc cca cat tcg gcc aga Leu Ser Val Glu Glu Ala Cys Lys Leu Thr Pro Pro His Ser Ala Arg			7892
	2505	2510	2515	
	tct aaa ttt ggc tat ggg gca aag gac gtc cgg aac cta tcc agc aag Ser Lys Phe Gly Tyr Gly Ala Lys Asp Val Arg Asn Leu Ser Ser Lys			7940
50	2520	2525	2530	
	gcc gtt aac cac atc cgc tcc gtg tgg aag gac ttg ctg gaa gac act Ala Val Asn His Ile Arg Ser Val Trp Lys Asp Leu Leu Glu Asp Thr			7988
	2535	2540	2545	
55	gag aca cca att gac acc acc atc atg gca aaa aat gag gtt ttc tgc Glu Thr Pro Ile Asp Thr Thr Ile Met Ala Lys Asn Glu Val Phe Cys			8036
	2550	2555	2560	2565
	gtc caa cca gag aag ggg ggc cgc aag cca gct cgc ctt atc gta ttc Val Gln Pro Glu Lys Gly Gly Arg Lys Pro Ala Arg Leu Ile Val Phe			8084
	2570	2575	2580	

	cca gat ttg ggg gtt cgt gtg tgc gag aaa atg gcc ctt tac gat gtg	8132
	Pro Asp Leu Gly Val Arg Val Cys Glu Lys Met Ala Leu Tyr Asp Val	
	2585 2590 2595	
5	gtc tcc acc ctc cct cag gcc gtg atg ggc tct tca tac gga ttc caa	8180
	Val Ser Thr Leu Pro Gln Ala Val Met Gly Ser Ser Tyr Gly Phe Gln	
	2600 2605 2610	
10	tac tct cct gga cag cgg gtc gag ttc ctg gtg aat gcc tgg aaa gcg	8228
	Tyr Ser Pro Gly Gln Arg Val Glu Phe Leu Val Asn Ala Trp Lys Ala	
	2615 2620 2625	
15	aag aaa tgc cct atg ggc ttc gca tat gac acc cgc tgt ttt gac tca	8276
	Lys Lys Cys Pro Met Gly Phe Ala Tyr Asp Thr Arg Cys Phe Asp Ser	
	2630 2635 2640 2645	
20	acg gtc act gag aat gac atc cgt gtt gag gag tca atc taccaa tgt	8324
	Thr Val Thr Glu Asn Asp Ile Arg Val Glu Glu Ser Ile Tyr Gln Cys	
	2650 2655 2660	
25	tgt gac ttg gcc ccc gaa gcc aga cag gcc ata agg tcg ctc aca gag	8372
	Cys Asp Leu Ala Pro Glu Ala Arg Gln Ala Ile Arg Ser Leu Thr Glu	
	2665 2670 2675	
30	cggttat cgc cgg tgc cgc gcg agc ggt gta ctg acg acc agc tgc ggt	8468
	Gly Tyr Arg Arg Cys Arg Ala Ser Gly Val Leu Thr Thr Ser Cys Gly	
	2695 2700 2705	
35	aat acc ctc aca tgt tac ttg aag gcc gct gcg gcc tgt cga gct gcg	8516
	Asn Thr Leu Thr Cys Tyr Leu Lys Ala Ala Ala Cys Arg Ala Ala	
	2710 2715 2720 2725	
40	aag ctc cag gac tgc acg atg ctc gta tgc gga gac gac ctt gtc gtt	8564
	Lys Leu Gln Asp Cys Thr Met Leu Val Cys Gly Asp Asp Leu Val Val	
	2730 2735 2740	
45	atc tgt gaa agc gcg qgg acc caa gag gac gag gcg agc cta cgg gcc	8612
	Ile Cys Glu Ser Ala Gly Thr Gln Glu Asp Glu Ala Ser Leu Arg Ala	
	2745 2750 2755	
50	ttc acg gag gct atg act aga tac tct gcc ccc cct ggg gac ccg ccc	8660
	Phe Thr Glu Ala Met Thr Arg Tyr Ser Ala Pro Pro Gly Asp Pro Pro	
	2760 2765 2770	
55	aaa cca gaa tac gac ttg gag ttg ata aca tca tgc tcc tcc aat gtg	8708
	Lys Pro Glu Tyr Asp Leu Glu Leu Ile Thr Ser Cys Ser Ser Asn Val	
	2775 2780 2785	
	tca gtc gcg cac gat gca tct ggc aaa agg gtg tac tat ctc acc cgt	8756
	Ser Val Ala His Asp Ala Ser Gly Lys Arg Val Tyr Tyr Leu Thr Arg	
	2790 2795 2800 2805	

	gac ccc acc acc ccc ctt gcg cggttgg gag aca gct aga cac	8804
	Asp Pro Thr Thr Pro Leu Ala Arg Ala Ala Trp Glu Thr Ala Arg His	
	2810 2815 2820	
5	act cca gtc aat tcc tgg cta ggc aac atc atc atg tat gcg ccc acc	8852
	Thr Pro Val Asn Ser Trp Leu Gly Asn Ile Ile Met Tyr Ala Pro Thr	
	2825 2830 2835	
10	ttt tgg gca agg atg atc ctg atg act cat ttc ttc tcc atc ctt cta	8900
	Leu Trp Ala Arg Met Ile Leu Met Thr His Phe Phe Ser Ile Leu Leu	
	2840 2845 2850	
15	gct cag gaa caa ctt gaa aaa gcc cta gat tgt cag atc tac ggg gcc	8948
	Ala Gln Glu Gln Leu Glu Lys Ala Leu Asp Cys Gln Ile Tyr Gly Ala	
	2855 2860 2865	
20	tgt tac tcc att gag cca ctt gac cta cct cag atc att caa cga ctc	8996
	Cys Tyr Ser Ile Glu Pro Leu Asp Leu Pro Gln Ile Ile Gln Arg Leu	
	2870 2875 2880 2885	
25	cat ggc ctt agc gca ttt tca ctc cat agt tac tct cca ggt gag atc	9044
	His Gly Leu Ser Ala Phe Ser Leu His Ser Tyr Ser Pro Gly Glu Ile	
	2890 2895 2900	
30	aat agg gtg gct tca tgc ctc agg aaa ctt ggg gta ccg ccc ttg cga	9092
	Asn Arg Val Ala Ser Cys Leu Arg Lys Leu Gly Val Pro Pro Leu Arg	
	2905 2910 2915	
35	gtc tgg aga cat cgg gcc aga agt gtc cgc gct agg cta ctg tcc cag	9140
	Val Trp Arg His Arg Ala Arg Ser Val Arg Ala Arg Leu Leu Ser Gln	
	2920 2925 2930	
40	ggg ggg agg gct gcc act tgt ggc aag tac ctc ttc aac tgg gca gta	9188
	Gly Gly Arg Ala Ala Thr Cys Gly Lys Tyr Leu Phe Asn Trp Ala Val	
	2935 2940 2945	
45	agg acc aag ctc aaa ctc act cca atc ccg gct gcg tcc cag ttg gat	9236
	Arg Thr Lys Leu Lys Leu Thr Pro Ile Pro Ala Ala Ser Gln Leu Asp	
	2950 2955 2960 2965	
50	tta tcc agc tgg ttc gtt gct ggt tac agc ggg gga gac ata tat cac	9284
	Leu Ser Ser Trp Phe Val Ala Gly Tyr Ser Gly Gly Asp Ile Tyr His	
	2970 2975 2980	
55	agc ctg tct cgt gcc cga ccc cgc tgg ttc atg tgg tgc cta ctc cta	9332
	Ser Leu Ser Arg Ala Arg Pro Arg Trp Phe Met Trp Cys Leu Leu Leu	
	2985 2990 2995	
	ctt tct gta ggg gta ggc atc tat cta ctc ccc aac cga tga	9374
	Leu Ser Val Gly Val Gly Ile Tyr Leu Leu Pro Asn Arg *	
	3000 3005 3010	
	acggggagct aaacactcca ggccatagg ccatcctgtt tttttccctt ttttttttc 9434	
	ttttttttt ttttttttt ttttttttt ttttctcctt tttttttcctt ctttttttcc 9494	
	ttttcttcc tttgggtggct ccatcttagc cctagtcacg gctagctgtg aaaggtccgt 9554	
	gagccgcttg actgcagaga gtgctgatac tggcctctct gcagatcaag t 9605	